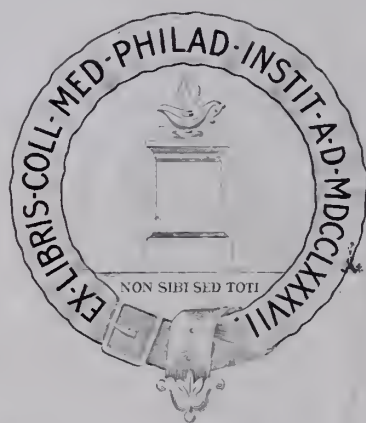


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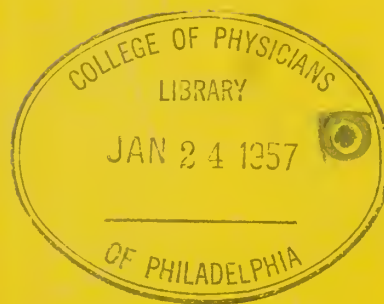
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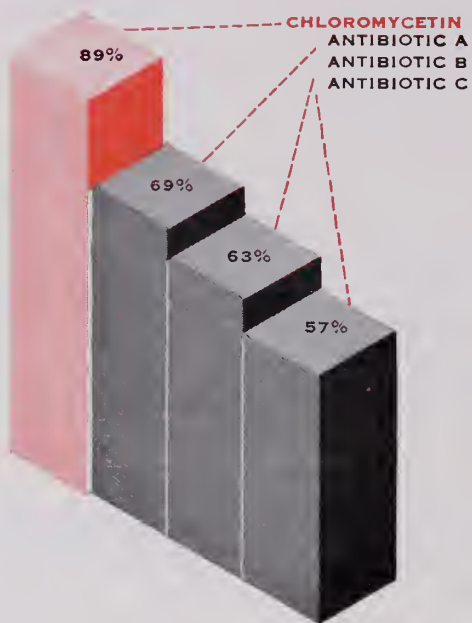


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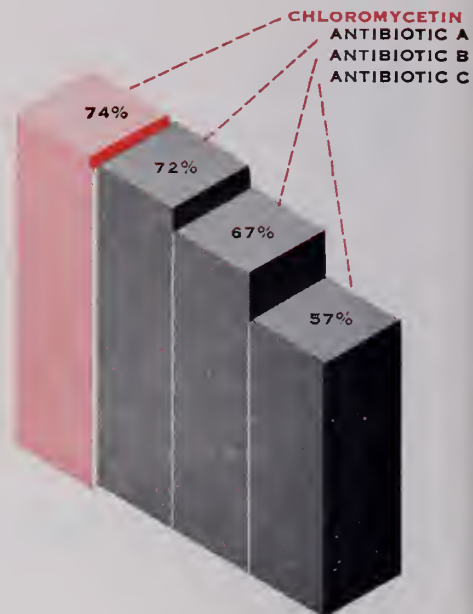
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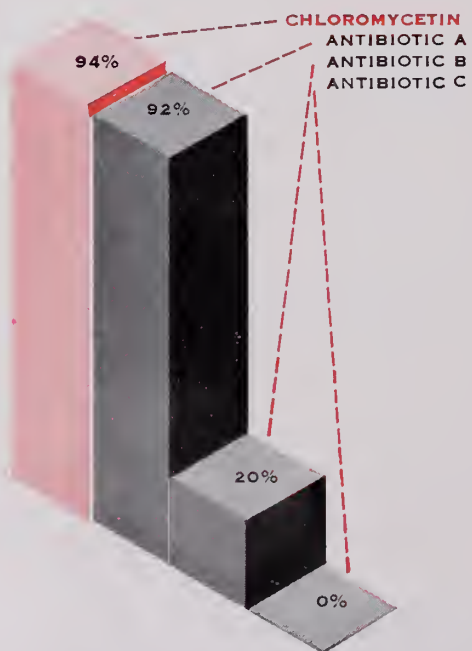
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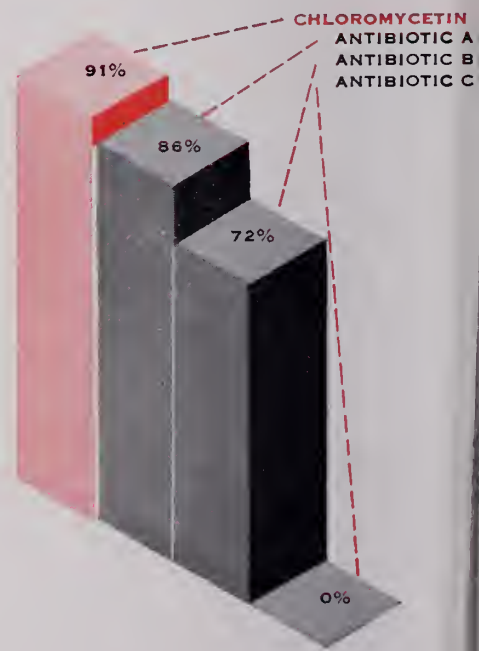
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The JOURNAL of the Oklahoma State Medical Association

Volume 50

Number 1

January 1957

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Prior Adrenocortical Steroid Therapy and Surgical Treatment

In addition to the many side effects associated with the relatively short term therapy, Mark A. Hayes* points out that there is accumulating evidence that prior treatment with either ACTH or Cortisone may significantly alter an individual's ability to effect necessary adjustments to a stressful situation such as an operative procedure. On the Yale University Service, during the 24 month period ending July 1, 1955, there were 53 operations performed on patients whose coexistent or primary disease might have warranted treatment with the steroids. Twenty-eight of these had received steroid therapy at one time, and of these, 15 developed a shock state refractory to blood replacement during an operative procedure or immediately after operation; an incidence of over 53 per cent. The remaining 25 patients with the same diagnosis who had not received therapy were operated on without a single episode of shock.

In the patients who developed shock, and also had discontinued therapy the time interval varied from three to 24 months. Therapy with ACTH seemed to be equally as culpable since two patients who had received this agent developed shock; one had discontinued therapy two months earlier and the other occurred while on continuing unchanged dosages of the trophic hormone. From this Data Doctor Hayes concluded that the total dosage, duration of therapy, and time free from steroids gives no reliable information as to the pituitary-adrenocortical responsivity for surviving an operative procedure. He then goes on to discuss the methods of preparing these people for a surgical procedure, the principles and details of which should be clearly in the mind of every surgeon.

Every branch of medicine makes an obligation of every physician to know and con-

stantly remember that a surgical procedure is an extremely hazardous one in patients who have been so treated. Even after 24 months one patient's pituitary adrenocortical system was not prepared to meet the stressful situation of an operative procedure. History taking continues to be important even when the diagnosis of appendicitis or fibroid of the uterus is quite obvious. Furthermore the patient and the family must know when steroids are being given lest this history be not available from any other source.

The American Physician And The World Medical Association

The World Medical Association has become a strong factor in protecting and promoting the professional interests of the medical profession and the cause of world peace.

Now in its ninth year, W.M.A. is a federation of the most representative national medical associations in each of 52 nations. These member organizations represent more than 700,000 physicians, the A.M.A. is a leading member of the World Medical Association.

Already, by solid accomplishments, the W.M.A. has earned the right to call itself "the international voice of organized medicine." Thanks largely to the United States Committee and similar supporting committees of physicians in other nations. W.M.A. has a well-tried constitutional structure, a small but efficient secretariat, and a trilingual journal whose world-wide influence and value to the profession is rapidly growing.

Even with a modest membership representing scarcely three per cent of American medicine, important achievements have been registered, many of which would have been impossible if the American pharmaceutical and related industries had not matched the financial support given the U. S. Committee by its physician members.

Last year, 176 members of the United States Committee attended the 9th General

*Hayes, Mark A.: The Wide Spread Use of the Steroid in Surgical Treatment as Complicated by Prior Adrenocortical Steroid Therapy. *Surg.* 40:95 (Nov.) 1956.

Assembly of the W.M.A. in Vienna. This privilege is available to members of national supporting committees.

The World Medical Association assists travelling physicians by providing them with introductions to colleagues in other countries, by making speaking engagements for them abroad, by acquainting them with visiting foreign doctors, and, of course, by sending the *World Medical Journal* to members of all national supporting committees.

In 1953, the W.M.A. sponsored the first World Conference on Medical Education, held in London. A second World Conference on Medical Education is planned for 1959, to be held in the United States.

Two other World Medical Association accomplishments bringing great credit to our profession and strengthening its solidarity throughout the world at the promulgation in 1948 of the Declaration of Geneva, comprising a modern re-statement of the Hippocratic Oath, and the adoption in 1949 of an International Code of Medical Ethics.

The activities of the W.M.A. in the field of social security are of interest to the American physicians, revealing boldly and unmistakably the physicians inherent need for freedom from third-party interference with the practice of medicine.

On the International stage, the W.M.A. has endeavored to counter the efforts of the International Social Security Association and the International Labor Organization to promote state medicine under social security programs. The W.M.A. has earned the respect of the International Labor Organization for its defense of the interests of medicine against the International Labor Organization Convention for Medical Socialization in 1952.

The W.M.A. has engaged in efforts to protect medical research; to safeguard the National Pharmacopoeias and the rights of individuals discovering new drugs and agents to name them.

Medicine's Contribution To World Peace

Medicine is universally recognized as one of the great world-wide arts and sciences that bind humanity together with a language

and a purpose transcending all differences of race, creed or color.

To make the language of medicine more articulate in the causes of international peace and human progress, the doctors of the free world are united in the World Medical Association, whose membership now embraces 53 National Medical Associations.

But it is never enough to establish great institutions. Only when *individuals* are given the opportunity to play an active part does any human organization "come alive" and begin to realize its basic purposes.

Every American doctor knows first hand the vital role he may play in guiding and protecting his profession by becoming an active member of his county, state and national medical societies.

Today, every American doctor has the opportunity—and the imperative challenge—to help make our profession a stronger influence for world peace. This he may do by joining our own United States Committee of the World Medical Association.

Similar "supporting committees" have been organized in a number of other leading nations whose medical societies, like the A.M.A., are members of the W.M.A.

In a timely action, W.M.A., at its 10th General Assembly in Havanna in October, adopted a six point program to implement one of its constitutional purposes: to promote world peace. This program includes the development of mutual exchange visits of foreign doctors; exchanges of distinguished medical teachers; establishment by each W.M.A. member national association of an "international visitor's bureau;" stimulation of visits by representatives of member associations; holiday exchange programs between doctors and their families; and exchanges of text books and medical and scientific publications.

To implement this program takes money—and interested members. *YOU* may play your part by joining the U.S. Committee of the W.M.A. Active membership dues for 1957 are \$10. To join the U.S. Committee—and to learn how you can contribute to this great cause—communicate with Clinton Gallaher, M.D., Shawnee, Oklahoma.

Case Report:

HYDATIDIFORM MOLE

F. C. BUFFINGTON, M.D.

A typical hydatidiform mole is derived from a true pathologic ova in which the embryo is either absent or very defective from the beginning, and in which, for reasons unknown, failed to abort at the usual time. Hydatidiform degeneration of a pathologic ova begins, in all probability, in the fifth week of pregnancy, the time when fetal circulation should begin. They are prone to occur in the villi of pathologic ova because the stroma is normally loose and the chorionic epithelium is normally active. Hydatidiform degeneration is less apt to occur in the non-pathologic ova because of a functional fetal circulation and relatively dense stroma and relatively inactive chorionic epithelium. Meyer, in his work on specimens, found one-third of the uterine abortions showed definite molar degeneration. He calculated 10 per cent of all conceptions end in hydatid degeneration, thus making the most common disease of the placenta and fetus during the early months of pregnancy. This condition has long been known and has been described early in history in the late Fifth and early Sixth century, but until 1827, it was described as coming from the chorion. The mortality in this condition has been high in the past—between 12 per cent and 60 per cent. In 1929, the A-Z test was first used, and since this time there has been a marked drop in the mortality rate between two per cent and 10 per cent. The following signs and symptoms are those which will help in an early diagnosis of hydatidiform moles in the obstetrical patient:

1. Eighty per cent of the moles occur in the first half of pregnancy.
2. Moles are more frequent in multi-

THE AUTHOR

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gravidas—40 per cent greater in the female past 40.

3. Bleeding is the most constant symptom.

4. Other toxic symptoms—excessive nausea and vomiting, and disproportionate pain and backache.

5. Rapid growth of the uterus—excessive size.

6. Hydropic villi in the vaginal discharge is diagnostic.

7. Vaginal examination—

a. Bilateral cysts of the ovaries—the ovaries may reach extreme size and this enlargement is due to the excessive hormone production of the primary lesion. The enlargement is caused by the distention of the follicles with fluid and partial luteinization of both granulosa cells and theca cells. Therefore, they are termed multiple theca-lutein cysts. There is no need for their removal, since they revert to normal if the source of the abnormal hormone production can be completely removed.

b. Fullness of the part of the whole lower uterine segment.

c. Undue uterine enlargement.

d. Absence of fetal heart tones or movement.

- e. Absence of amniotic fluid.
- f. Excessive abnormal uterine bleeding.
- g. Hydropic villi in the vaginal discharge is diagnostic.

8. The most important laboratory test is the A-Z test which shows an increasing positive test as this condition progresses.

Treatment in these cases and the manner of removal of the mole, requires an individualization of each patient. The most important part of the treatment is subsequent examinations of the patient, including tests for the urinary gonadotropin. It is by this means that one is able to definitely assure himself and the patient that there is no evidence of chorion epithelioma, which follows moles.

The case to be reported is that of a 25 year old multipara, who delivered normally, a child in 1952, and since that time has had a normal history until April 11, 1955. The last normal period that this patient had, was on this date. Nausea and vomiting and a general feeling of malaise and disability were present from the onset of this condition. The patient came to the doctor for the first time on June 28, 1955. On that date, the examination of the patient showed that the uterus was the size of a three month pregnancy. The patient's nausea was extreme and appeared to be toxic. Abdominal discomfort, particularly in the upper left quadrant, was present. The patient was given novogran daily for approximately one week without any relief of the nausea. Also, she received sedation during this period. The uterus showed marked increase in size, and the patient was hospitalized on July 14, 1955. Urinalysis was taken on the 15th, 18th and 19th of July, which showed a trace of albumin and rbc's and wbc's running from one to 14 per high power field. There was a rare hyalin or epithelial cast. The blood count on the 15th of July was: hgb 87 per cent, rbc's 4,420,000, wbc's 11,600, polys 65, lymphs 30, monocytes 1, eosinophiles 1, stabs 3. A blood NPN was taken which was 33 mgs per cent. On July 20, 1955 a KUB reported a huge mass filling the pelvis and extending out of the pelvis to the level of L-2. This is higher on the right side



Figure 1. Opened uterus shows dilated uterine cavity filled with hemorrhagic placental-like tissue. The surface shows numerous minute cystic structures—weighs 804 grams.

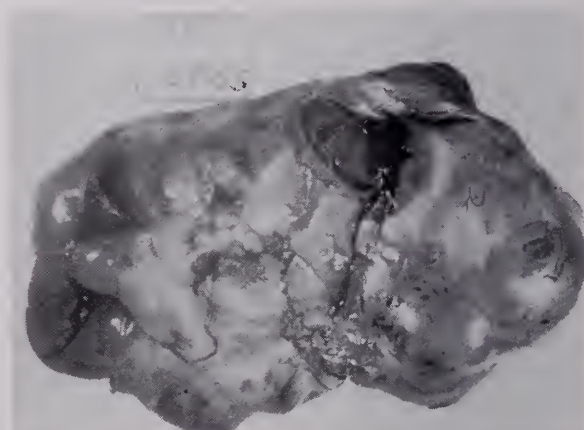


Figure 2. Specimen of ovary showing distention of the follicles with fluid—weighs 436 grams, measures 15 x 9.5 x 6.0 cm.

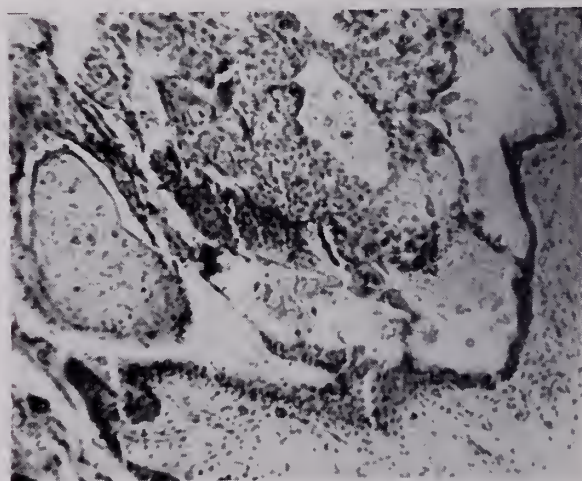


Figure 3. Representative section shows hydatidiform degeneration of chorionic villi.

than on the left. No fetal structures are seen in this mass. A second large mass fills the left upper abdomen and appears to be separate from the spleen, but this is not definite. The liver is not enlarged. Urogram shows good function from both kidneys. The ureters are nearly blocked by the pelvic mass, so that there is a dilatation of the upper ureters and calyces and pelvis. Barium Enema—Colon filled with no tumor and no displacement. The stomach was pushed upward by the mass but was not connected with it. The spleen is also seen to be separate from the mass in the upper abdomen. An A-Z test reported 12 cc of urine, intravenous several corpora hemorrhagica present. 0.5 cc of urine, intravenous a few corpora hemorrhagica present. Impression—Mole or a choriocarcinoma suspected.

On July 26, 1955, the uterus was approximately the size of a 22 week pregnancy, although it had only been 14 weeks since the patient had menstruated. The uterus was symmetrically enlarged and movable. There was a larger mass in the upper left quadrant which was also moveable and not tender. A large needle was passed into the uterus through the midline of the abdomen and there was no fluid withdrawn, only a few drops of blood was obtained. It was the opinion of a consulting gynecologist that we were dealing with a hydatidiform mole.

The patient was taken to surgery on July 26, 1955, at which time a low midline abdominal incision was made and the abdomen, after it had been opened, revealed a large uterus that extended above the naval; both ovaries were extremely large. The ovary on the right, at the time of manual examination, ruptured, and bleeding occurred in the cystic walls of this ovary, and it was decided that this ovary would be removed. Due to the extreme size of the uterus, and since this was a multipara, the judgment at the time of surgery was that the uterus should be removed. A total hysterectomy was done. The left ovary measured 6" by 3" in size, multi-cystic in structure. The right ovary, which was removed because of the bleeding, and the uterus, are shown in figures one and two. There was no difficulty encountered in the surgery, and the patient made an uneventful recovery. She left the hospital on the 11th post-operative day,

having no complaints at the time of her discharge. The pathological report in this case was hydatidiform mole, apparently benign, multiple lutein cysts of the ovary. There was no evidence of malignancy in this case. The uterus weighed 804 grams. The patient has been followed since this time, and has been examined on several occasions—found to be completely free of any symptoms. A repeat of the Friedman test was made on February 6, 1956, and was reported as being negative.

Summary

1. It would be of some benefit for a gross examination of all abortus that one sees.
2. Fifty per cent of chorion epitheliomas follows moles, while one per cent to five per cent of all moles are followed by malignancy.
3. Be alert for abnormal bleeding following a normal or ectopic pregnancy—each precedes 25 per cent chorion epitheliomas.
4. Treatment of hydatidiform moles is an individualization of each case.
5. The A-Z test is the most important diagnostic laboratory test, and equally important to assure the absence of malignancies following removals of moles.
6. Most consistently found with hydatidiform moles is excess bleeding, increased toxic symptoms, rapid growth of uterus, and presence of hydropic villi in vaginal discharge.

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URETERAL CALCULI

DONALD D. ALBERS, M.D.

Urinary tract calculi give severe symptoms because of obstruction to the flow of urine in the kidney, ureter, bladder or urethra. Ureteral calculi are not only the most often encountered but the symptoms they produce are the most dramatic, often terrifying. This report will concern ureteral calculi with their complications and the different methods of removing them. It would be remiss not to at least mention that the prevention of calculus formation may be important in the management, but practically, except for having a patient drink large volumes of water, there is little to offer. Salicylamide is the newest drug used to decrease idiopathic stone formation and may be found useful. Calculi in association with hyperparathyroid disease, uric acid or cystine stones resulting from metabolic disturbances and calculi formed because of stasis and infection are preventable but they are by no means the common ones.

Diagnosis

The diagnosis of a ureteral calculus is usually suggested by terrific pain anywhere from the region of the costovertebral angle to the testicle or labia on the same side. On microscopic examination the urine often contains red cells, but may not. In the evaluation of 140 patients with ureteral calculi, microscopic blood was found in the urine in 50 per cent on the first examination. Twelve per cent had gross hematuria. Microscopic blood will be found in most patients with ureteral calculi if several urine studies are made. Two patients had asymptomatic gross hematuria.

Abdominal complaints brought 10 of these 140 patients with ureteral calculi to the hospital. Three had appendectomies before the ureteral calculus was found. One patient was thought to have an acute abdomen and was explored. Two patients entered with the picture of intestinal obstruction, which

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required a few days for clarification, and four others had such board-like rigidity of the abdomen on admission that an acute abdomen was seriously considered.

When a ureteral stone is suspected, one injection of a narcotic will often seem to solve the problem when the pain does not recur. If pain persists or recurs and microscopic hematuria continues over two or three days an excretory urogram should be made.

Problems

One should be conservative in managing most patients with ureteral calculi because it is difficult to select those who will not pass those stones spontaneously, especially when the stones are .5 cm. or less in diameter. The patient should be under surveillance and have a repeat excretory urogram in about two weeks to warn of danger to the upper urinary tract. *Three problems* may arise which dictate the time for surgical intervention, either transurethral or open surgical. *First:* the patient may have uncontrollable pain for several days, making intervention mandatory. Usually, however, the first episode of pain is the most severe. *Second:* Infection which is difficult to control may develop in the obstructed kidney. If the infection does not subside in two or three days the kidney requires better drainage and surgical intervention will become necessary. The *third* problem is impaired renal function. How long a kidney may remain non-functioning on an excretory urogram and not be permanently damaged is probably an individual variation, but in gen-

eral over two weeks would be considered hazardous. Various degrees of hydronephrosis also indicate interference with function. Whether the stones should be removed transurethrally or by open surgery is a matter of personal judgment and experience.

Transurethral Removal

Transurethral management is usually considered advisable when dealing with a calculus .5 cm. in diameter or less which lies in the lower third of the ureter, and in a patient who presents one or more of the problems which warrant intervention. Various types of stone extractors are available. This author prefers one of the wire basket types. Usually if a No. 5 ureteral catheter can be passed by the stone it will be possible to get an extractor by. In case the stone cannot be extracted, intubating the ureter for 48 hours with a ureteral catheter will relieve the obstruction and occasionally the dilatation from the catheter will allow the stone to pass after the catheter is removed. In some cases it is impossible to get a catheter by the stone and occasionally a stone may be pushed back into the kidney. Of the last 45 cases of ureteral stones in which removal was attempted transurethrally 82 percent were extracted. Only four patients required open surgery and there were no complications of note. It is advisable to intubate the ureter for 48 hours following removal of a stone.

Open Surgical Removal

Open surgical removal is usually advisable with a calculus larger than .5 cm. in diameter which is lodged anywhere in the ureter, but is usually an elective procedure unless the patient presents one or more of the problems which justify intervention. The surgical approaches are discussed in any surgical text, but it seems worthwhile to

emphasize the muscle splitting approach to ureteral stones in the region of the lower pole of the kidney. Through a short subcostal incision the latissimus dorsi may be retracted posteriorly and the external and internal oblique muscles anteriorly, leaving the transverse abdominis fascia which can be split in line with the fibers. The stone can then be located in the ureter and removed without cutting a muscle. This approach was utilized in 10 of the 34 patients in this series requiring open surgery. Many of these patients are able to leave the hospital in four or five days.

Percentage of Utilization of the Methods

In this series of 140 patients 24 per cent required open surgery, in 35 per cent the stones were extracted transurethrally, and 42 per cent passed their stones spontaneously. It must be emphasized that many patients with ureteral calculi pass them soon, often with their first episode of pain, and do not come to the urologist. Many times the urologist is consulted over the phone or by having X-ray films sent to him in cases that do not require urologic surgery. This series does not include these cases, so it is thought that in the over-all stone problem those who pass their stones are well over 50 per cent of the total group.

Summary and Conclusions

Most ureteral stones pass spontaneously. Problems which arise in the management of a patient with a ureteral calculus are presented. Their evaluation helps decide the time for surgical intervention. The transurethral method is evaluated and with proper selection of cases is a valuable method of removing ureteral calculi. Open surgery was found necessary in only 24 per cent of this series.

O.S.M.A. Annual Meeting

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DISEASES *of the* ESOPHAGUS

JOHN M. CAREY, M.D. and ALLEN E. GREER, M.D.

Within the past decade there has been considerable advance in our knowledge of the esophagus.¹ There has developed a better understanding of its disease processes and of their management. Surgery of the esophagus, in particular, has made tremendous gains so that now conditions which have been considered incurable or even beyond hope for palliation can be viewed with much greater optimism.^{2,3,4} It is also true that some older techniques have gained renewed acceptance; others have given way to more effective ones. We submit this report with the hope that a review of current practices in treating diseases of the esophagus may be of some interest to practitioners in Oklahoma.

Tracheoesophageal Fistula

Esophageal atresia with tracheoesophageal fistula is the only important congenital anomaly of the esophagus. Its incidence is in excess of one in 3000 deliveries and an estimated ten to twelve cases are seen yearly in Oklahoma City. The condition should be promptly and easily recognized during the first attempts to give the infant water or nourishment. There is inability of the infant to swallow, cyanosis, and abundant frothy sputum which rolls out. The diagnosis is verified by the interruption to transnasal passage of a soft rubber catheter. On occasion, the instillation of a few drops of brominal or lipiodol will help outline the proximal pouch. Barium should never be used because aspiration into the tracheobronchial tree is apt to occur and will cause marked irritation.

Surgical correction of the anomalies provides the only hope for survival. Contraindications to surgery are severe associated anomalies, chiefly of the gastrointestinal, genitourinary, or nervous systems, or the terminal state of the infant. The likelihood of success is decreased by prematurity, cy-

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anosis, pneumonia, or excessive delay before surgery. However, we recently had an infant in whom the diagnosis was not made before the sixth neonatal day, who made a completely uneventful recovery following surgery.

The first successful anatomical repair was reported by Haight and Towsley in 1943. Their method, with little change, has become the procedure of choice. A right thoracic approach is used with division of the azygos vein to allow visualization of the fistula as well as the atretic portion of the esophagus. After dividing the fistula close to the posterior tracheal wall, end-to-end anastomosis between the esophageal ends is performed. Fortunately, in the great majority of cases this may be carried out after adequate mobilization, particularly of the upper esophageal pouch. The chest wall is closed in layers after drainage of the posterior mediastinum. Gastrostomy is not routinely performed but may be done in two or three days if there is concern over the anastomosis, if there is evidence of esophageal obstruction, or if excessive leakage from the anastomosis occurs. A fastidious attention to postoperative details is required. The pharynx must be repeatedly aspirated to prevent the development of pneumonia. Administration of suitable antibiotics, mist inhalations, and the careful use of electrolytes are but a few of the major concerns in postoperative management. Acceptance of under-hydration is the essence of good treatment. Too often, despite all efforts, the infant will succumb and autopsy may fail to

reveal any good or sufficient cause. Survival of an increasing number of infants with this otherwise hopeless anomaly gives perhaps the most happy aspect to esophageal surgery within the past ten years.^{6, 7, 8}

Esophageal Diverticula

Diverticula of the esophagus occur in three major areas—the upper or pharyngo-esophageal area, the mid esophagus, and the lower esophagus or epiphrenic area. By far the most important and frequent is the first.

Pharyngo-esophageal diverticula are actually posterior herniations of mucosa between the inferior pharyngeal constrictor and the cricopharyngeus muscles. They are usually present on the left side of the neck, but some 15 to 20 per cent appear on the right. These diverticula have long been known to cause difficulty in deglutition. At times patients are aware of food and fluid spontaneously appearing in the mouth or a gurgling sensation in the neck when the sac empties. It is less well recognized that they may produce pulmonary changes due to nocturnal spillover of the contents of the pouch into the trachea. Bronchiectasis, lung abscess, and pneumonitis may complicate the primary lesion. The diagnosis is made by a suspicion of the abnormality and obtaining an esophagram to outline the pouch.

The late Frank Lahey⁹ was the most voluminous exponent of the two stage removal of these diverticula. The majority of surgeons, however, currently practice a one stage diverticulectomy which is safe, effective, and certainly less trying and expensive to the patient than the two stage procedure.¹⁰ As in most fields of surgery it is important to do enough but not too much; the herniated mucosa must be completely removed, but the lumen of the esophagus must not be compromised by over energetic sacrifice of normal mucosa. This can be done by passing a large gastric tube before excising the pouch.

Mid thoracic diverticula are of the traction variety, secondary to inflammatory changes extrinsic to the esophageal wall. Because they are usually small and because their necks are broad and their fundi elevated allowing easy drainage, they are often asymptomatic and rarely require treatment.

Epiphrenic diverticula are not nearly as common as the pharyngo-esophageal variety. Consequently, no one has had adequate experience to be dogmatic in their management. They may give rise to esophageal symptoms, predominantly dysphagia or rumination, or cause secondary pulmonary problems by transdiaphragmatic aspiration of the retained food and secretions. There is no specific information as to the cause of these herniae (for that is their more exact definition), but certainly an element of spasm or dystonia at the cardia may play a significant etiologic role.

It is rather well agreed that all epiphrenic diverticula should be repaired.¹¹ Once formed, they have a tendency to enlarge and with great size become increasingly difficult to repair. Excision of all redundant herniated esophageal mucosa with an anatomical reconstruction of the circular and longitudinal muscle wall constitute the basic technical steps of the operation. A division of the circular muscle at the cardia (Heller procedure) may at times be helpful to combat the spasm which has been etiologic in the formation of the hernia. The recommendation of DeBakey and Creech¹² to perform a lower esophagectomy with excision of the diverticulum and the cardia is probably unwise except in unusual circumstances, because of the great possibility for development of regurgitation and esophagitis post-operatively.

Esophagitis

Excluding the esophagitis produced by ingestion of caustics, inflammation of the esophagus is the most common non-malignant condition. It may appear following protracted emesis, after nasogastric intubation, as a sequel to diaphragmatic hiatus hernia, or after esophago-gastric anastomosis. Considerable attention has been focused on this condition in both British and American literature.^{13, 14, 15} Probably in all instances, the pathogenesis is a regurgitation of gastric or enteric secretions to produce superficial erosion or deep ulceration of the vulnerable esophageal mucosa.

Reflux esophagitis is a common sequel to surgical procedures which circumvent or de-

stroy the anatomical mechanism at the cardia which normally allows only one-way passage from the esophagus to the stomach. At least one third and probably many more patients with an esophago-gastric anastomosis develop esophagitis.¹⁶ This may be troublesome and occasionally fatal. For cancers of the esophagus, it is obviously impossible to avoid *en bloc* removal of the area when possible. For benign conditions of the lower esophagus, however, emphasis on preservation or restoration of the anatomic and physiologic integrity of the cardia is well taken.¹⁷

Esophageal Hiatus Hernia

Although the primary defect in hiatus hernia is juxta-esophageal, the secondary changes and symptomatology are predominantly esophageal. Epigastric distress, pyrosis, and eructation are common complaints of patients with hiatus hernia. This condition has been called the masquerader of the upper abdomen with good cause.¹⁸ Diseases of the gallbladder, duodenal ulcer or pancreatitis, to list a few, may be simulated by a hiatus hernia. After years of emphasis on its frequency, hiatus hernia is now widely and commonly recognized.

Three types of hernia are accepted as occurring in this region.^{19, 20, 21, 22} The most common is a sliding type, the next para-esophageal or para-hiatal, and finally the short esophageal form. The distinction between these three is useful clinically as the para-hiatal type seldom produces the esophagitis so common in the sliding type. The surgical repair also varies somewhat as to the type present. Furthermore, the short esophageal variety is the most difficult to repair and will give the poorest surgical result. Unfortunately, it is not always possible to distinguish between these forms preoperatively despite radiographic study and esophagoscopy.

The origin of symptoms in patients who have hiatus hernia is not always clear. Why one patient with a large hernia may be asymptomatic, while another with a hernia of lesser size will have pain, dysphagia, or bleeding seems an enigma. Certainly the occurrence of gastric reflux and esophagitis,

provides only a partial answer. The patient with symptoms indeed may not have demonstrable esophagitis. A recent study by Aylwin, utilizing analysis of nocturnal content of the hernia using tiny indwelling tubes, indicates that the production of pepsin from local esophageal glands as well as gastric reflux may cause esophagitis. Variations in salivation (which inactivates the pepsin by raising the pH), and the relative competence of the cardia even with herniation will further account for differences in the clinical picture.

An appreciable number of patients with hiatus hernia will have an unexplained anemia. In most of these, esophagoscopy and/or gastroscopy will fail to demonstrate the bleeding source in the esophagus or stomach. Yet these patients usually have relief of the anemia following repair of the hiatus hernia.

The time has not arrived when all patients are referred for surgical correction. Incarceration and strangulation is a rare occurrence and possibly supports a policy of conservatism. Those individuals with significant symptoms, with evidence of esophagitis or bleeding, or in whom the hernia includes a third or more of the stomach should have surgical correction.

Anatomical repair, including removal of the redundant hernia sac, repair of the phreni-esophageal ligament, and reduction of the diaphragmatic muscular hiatus to a normal size are essentials to success. The many aspects of hiatus hernia are so important that we feel a separate report should be submitted concerning them.

Benign Strictures

Most strictures of the esophagus appear as a sequel to esophagitis. True congenital strictures are uncommon even in infants. In the great majority of patients persistent dilatation, using the Plummer dilators, passed over a previously lodged string will suffice to relieve symptoms. Allison¹⁷ has recently suggested that the more refractory cases may be handled by extra-mucosal division of the esophageal wall overlying the stricture. He has found that dense reaction in the muscular wall is uncommon and that

surgical division is simple and effective. On occasion, sleeve resection of the dense localizing strictures may also be useful.

Strictures due to the ingestion of caustics are troublesome especially when they are extensive as so many of them are. If the reaction in the esophageal wall is not too extensive early and repeated dilatations form the treatment of choice. Dilatation may have to be carried out over the course of many months or years and the patient is instructed to return at any time there is evidence of impairment to the passage of food. If damage to the esophageal wall is at all considerable, an esophageal resection is usually performed.^{25, 26} This often necessitates a high esophageal resection. The postoperative appearance of regurgitation and esophagitis may complicate an otherwise successful repair. To further add to the difficulty of the physician, these patients are often uncooperative (post-Suicidal) and even belligerent.

Achalasia

The basic defect in this condition is probably the loss of the myenteric plexus in the lower esophagus. Physiologically,^{27, 28} there is a loss of coordinated, progressive contraction of the esophageal muscle. The failure to initiate a primary peristaltic wave delays the opening of the door to the stomach. Pathological changes include elongation and hypertrophy of the esophageal musculature resulting in so-called megaesophagus. In about 10 per cent of patients, secondary pulmonary changes such as pneumonitis, abscess or bronchiectasis follow (transadital) aspiration of the contents of the esophagus.²⁹

Achalasia or cardiospasm is not difficult to diagnose. Obstruction to passage of food, vomiting or regurgitation, and occasionally actual pain on swallowing are the cardinal features. The anamnesis and barium fluoroscopy are usually adequate for the diagnosis. Recent attention has been directed to the production of a tetanic contraction of the lower esophagus and of severe pain following administration of small doses of Mecholyl in patients with achalasia.³⁰ This has not been reproduced in normal individuals nor in patients with other forms of esophageal disease.

From the report of the experience at the Mayo Clinic,²⁹ hydrostatic dilatation of the tight cardia not simple dilatation, can often give prolonged relief. This method is not always easy to carry out and it is not entirely without distress or danger to the patient. If a brief trial with this method proves ineffective, the treatment of overwhelming choice is the Heller procedure³¹ which is simple and effective. Esophagocardio-myotomy preserves the anatomic mechanism at the cardia preventing gastric reflux and esophagitis.^{15, 28} We have been most gratified by our own operative results in the few cases in which it has been used.

Spontaneous Perforation of the Esophagus

Use of the term "spontaneous" has gained popularity. It is not a correct designation for this condition except to distinguish it from the rupture following mechanical dilatation of the esophagus or esophagoscopy. In nearly all instances, perforation of the esophagus is post-emetic (often during alcoholic debauch). The site of rupture of the esophageal wall is usually in the left posterolateral wall a few centimeters above the cardia, but may extend into the stomach. The tear is usually linear but may include the entire circumference of the lower esophagus.

This condition has become well recognized in the past few years.^{32, 33, 34} Unrelenting lower thoracic and upper abdominal pain, dysphagia, fever, pleural effusion (left, more often than right), and subcutaneous emphysema at the base of the neck form a fairly constant clinical picture. Spontaneous perforation of the esophagus should be considered in the differential diagnosis of all lower thoracic and upper abdominal catastrophes.

Spontaneous healing of the perforation has been reported but is unusual and is often complicated by abscess formation, empyema, or the formation of a esophageal fistula. Over 100 cases have appeared within the past five years wherein prompt diagnosis, transthoracic closure of the esophageal rent and drainage of the pleural space has resulted in survival of many of the patients.³⁵ All practitioners should be aware of this

condition because of the gratifying results following prompt diagnosis and surgical treatment.

Cancer of the Esophagus

It has been stated that the history and treatment of diseases in the esophagus is full of tragedy. This is no less true in cancer of the esophagus. Despite the ease of recognition of this condition and its prompt treatment, the great majority of patients succumb shortly to their disease.³ The anatomical location of the esophagus, especially in the upper thoracic and cervical areas where there is such close opposition to indispensable structures, defeats all attempt at any form of feasible *en bloc* resection.³⁶ Furthermore, cancers of the esophagus metastasize early and widely in the chest, to the cervical and sub-diaphragmatic lymphatic areas, and to the liver. However, the situation is not hopeless particularly for lesions of the lower third. Taking the reports of institutions with the most extensive experience,^{37, 38, 39} esophagogastrrectomy for lower third lesions will yield from 15 to 45 per cent five year survivals in those in whom resection is possible. Furthermore, the relative ease of resecting lower third lesions with its lower operative mortality (7 to 25 per cent) justifies palliative resection in selected cases. The life of such patients seems definitely prolonged and on occasion, a palliative resection will result in long term survival.

Because of the despair in salvaging a sizeable percentage of patients with cancer of the esophagus alternative measures have been utilized.^{40, 41} It is probable that more will continue to be exploited particularly for lesions in the upper half. For cancers of the cervical esophagus or the upper third of the thorax, intense radiation therapy has merit.⁴² These cancers are more accessible to radiation; hence a larger dose may be administered. There appears to be prolonged survival in the patient with radiation over those who have not received it. Furthermore, scattered reports of apparent cures or complete local regression following radiation have been recorded in the literature.⁴²

To overcome the problems inherent in esophageal obstruction in patients with in-

curable disease, various types of surgical bypassing have been performed such as esophagogastrostomy or esophago-jejunostomy,⁴³ It becomes a matter of surgical philosophy to decide whether or not to perform such extensive procedures for purely palliative reasons. Local excision of the tumor by a sleeve resection of the esophagus and replacement with a plastic cylinder (Berman)⁴⁴ has had some success and support. Intubation through the tumor mass by the means of a Mackler tube has been of considerable value in maintaining a passage-way for food in incurable cases. This method is easier to perform and carries a lower risk to the patient than sleeve resection with replacement by a plastic cylinder. Mackler⁴⁵ tubes may be placed within the tumor mass by esophagoscopy at the time of surgery when the incurability of the lesion has been determined. It may also be placed after dilatation of the tumor over a lodged string when exploration has not been considered advisable. Unfortunately, these tubes may slip through the tumor so that some means of anchoring them is necessary. A string tied to the upper end of the tube and passed out through the nose has been the easiest method of achieving this in our experience.

Esophageal Varices

There are so many aspects regarding the problem of esophageal varices that a full sized monograph would be necessary as an introduction to the problem.⁴⁶ However, since bleeding esophageal varices is probably the most urgent and spectacular of all conditions of the esophagus, some consideration must be accorded it here.

Certainly the assurance that any particular case of massive upper gastrointestinal bleeding is due to esophageal varices must be determined before effective treatment. The anamnesis, physical examination, and suitable liver function tests should usually make the diagnosis clear. Gentle esophagoscopy⁴⁷ may on occasions be indicated to support the diagnosis. While there may be honest concern regarding the safety of such an examination in the presence of bleeding varices, it may be crucial to the diagnosis. In practice, the presence of esophagitis or a

constant welling up of blood from the stomach or lower esophagus may obscure visualization of the mucosa so that the endoscopist may still be in doubt as to the presence of varices.

Most observers feel that the administration of large volumes of blood and general supportive measures are inadequate to control the massive bleeding in many patients. To allow the patient to bleed continuously would only deplete his reserves to the point that any treatment would be difficult. Prompt control of the bleeding may be initiated by the Sengstaken-Blakemore balloon tamponade.⁴⁸ Precautions in the use of this system to avoid pharyngeal or esophageal ulceration, and failure of the balloons to deflate, obstruction of the airway, or plain intolerance by the patient are all to be observed.⁴⁹ If there has been no reasonable control of the bleeding after 24 or 48 hours and before severe depletion of the patient, the procedure of recent popularity has become transesophageal ligation of the major varix systems.^{50, 51} This is accomplished much in the manner of ligation of bleeding hemorrhoids. Following control of the acute phase of the bleeding and after allowance of several weeks for adequate preparation of the patient, some form of porta-caval anastomosis should be carried out. This may either be a spleno-renal shunt for the extra-hepatic forms of portal hypertension, or a porta-caval shunt for the intrahepatic forms. An operative approach which gives generous exposure is the thoracoabdominal one through either the eighth or ninth intercostal space. This is done on the right side for a portal caval shunt or on the left side for a splenorenal anastomosis. The various types of mediastinal packing, esophageal, gastric or combined resection are mentioned only to indicate a lessening importance of these methods. Finally, it should be said that there is extreme difficulty in the evaluation of the effectiveness of any form of therapy in portal hypertension. There is such a varying clinical picture in patients encountered and the prognosis is so changeable under medical therapy alone, that to define the benefit of any form of surgical treatment is most difficult.⁴⁶

Summary

1. Within the past decade there have been significant advances in understanding and surgical treatment of diseases of the esophagus.

2. Esophageal atresia with tracheoesophageal fistula has always been a fatal anomaly until surgical correction made possible salvage of many infants. The condition should easily be recognized and treatment promptly instituted.

3. Esophageal diverticula should be considered in all patients with dysphagia and rumination. Secondary pulmonary diseases due to aspiration are common complications. Surgical removal is easy and effective in competent hands.

4. Esophagitis is due to peptic action on the vulnerable esophageal mucosa in most instances. A conservative approach to benign lesions at the cardia to prevent or correct gastric reflux is emphasized.

5. Benign strictures of the cardia are usually secondary to esophagitis and in most instances may be managed by dilatation. Extensive strictures due to ingestion of caustics are a surgical problem and a vexing one.

6. Achalasia is a "physiological" disease of the esophagus due to a disordered motor mechanism. Hydrostatic rupture of the "sphincter" at the cardia is often helpful in treatment but there is growing confidence in the more exact surgical esophagocardiomyotomy.

7. "Spontaneous" perforation of the esophagus is a post-emetic rupture. The physical findings are marked and the condition should be considered in any upper abdominal and lower thoracic catastrophe. Prompt surgical closure of the rent and closed drainage of the area will produce many survivors from a highly lethal condition.

8. Cancer of the esophagus still presents a dismal picture for survival especially when it occurs in the upper two thirds of the organ. Palliative procedures, including radiation therapy and intubation of the tumor to allow passage of food are the mainstays of present therapy. For cancer of the lower

third and cardia surgical resection still has considerable to offer in hope for cure and palliation.

9. Bleeding esophageal varices present a dramatic situation calling for prompt diagnosis and treatment. Balloon tamponade or ligation of the bleeding varices are the best additional methods of control to the usual medical program. Some form of portacaval shunt is often required following the acute phase of bleeding.

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PRESIDENT'S LETTER



The Yuletide Season has passed, another New Year has been greeted, and if we believe in Santa Claus, it's because he was made so real in our childhood by "A Visit from St. Nicholas" and not because of the reading of the mail in the office or listening to the "gripes and groans" of the profession!

One may predict with considerable confidence the reception this New Year will receive. There will be those who will express disappointments because it will provide no "answers" or "formulas" for quick "solution"—and this will be true. Great moral issues carry their own built-in solutions. These may be delayed, sometimes indefinitely, by resistance born of fear, misunderstanding, custom, tradition, greed, meanness, honest conviction and organized force. There can be no mathematical formula for solving moral problems. The solution comes about soon, or late, depending upon how many persons will labor and will stand up and be counted when moral issues are at stake. A Univac machine is of no value in interpreting any code of ethics (the old one is being re-written). If one question, "What is good for the patient," is honestly answered, we will have few worries.

All ages have been disturbed; this one is no exception. We are confused, bewildered, afraid of our own forces, in search not merely of a road but even of its direction. There are many voices of counsel but few voices of vision; there is much excitement and feverish activity, but little concert of thoughtful purpose. We are distressed by our own un-governed, undirected energies and do many things—but nothing for long.

Why do we constantly deal in petty affairs? Why is our malpractice incidence so high? Why do we constantly allow ourselves to be divided, as we were when we negotiated the Medicare Contract? Would such a personage as John L. Lewis allow the government to deal separately with each "local"? Why are we frequently taken to task by organizations who are not interested in good medicine, but in petty politics? Why are County Societies unable to solve their own problems?

It is our duty to find ourselves. It is our privilege to be calm and know that truth has not changed, that old wisdom is more to be desired than any new nostrum, that we must neither run with the crowd nor deride it, but seek sober counsel for it and for ourselves.

At times I feel that the "women" out-number the men in this Association.

Henry M. Chase M.D.
President

Special Articles

The SCHOOL of MEDICINE

JOHN W. DeVORE, M.D.

During the years since World War II, many of us as practicing physicians have been concerned both over the increasing cost of medical education and over the quality of medical education given to the young men who are each year joining us in the practice of medicine. The administration of the University of Oklahoma and of the School of Medicine have cooperated in an effort to inquire not only into the over-all administration of the medical school but into the details of the functions of the various departments. The department chairmen and members of various departments have spent many hours reviewing the problems which they have encountered and the possible solution to those problems.

In order that the members of the State Medical Association might all share in the information so obtained, the school administration and the editors of the *Journal* of the Oklahoma State Medical Association have agreed to the publication of a series of articles during the next few months.

The budget of the Medical School has increased with each biennium. Careful investigation of the individual departments of the medical school, however, indicates that these increases have not kept pace with the basic needs. Several factors enter into this. The medical school classes have increased from the admission of 60 freshmen each year to 100 at the present time. During the same period, there has been a marked increase in the number of graduate students in each of the medical sciences. At the same time an excellent postgraduate program for practicing physicians has been developed through the cooperation of many departments within the medical school. There is an increasing need for expansion of the teaching program for technologists in many fields including Clinical Pathology, Radi-

THE AUTHOR

This is the first of a series of articles prepared by the University of Oklahoma School of Medicine.

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ology and Physical Medicine. The need for expansion of both undergraduate teaching for nurses is an acute problem illustrated by the shortage of qualified personnel in many hospitals in the State. The teaching of all such professional and technical personnel requires the cooperation and time of many individuals from many departments throughout the Medical Center. The teaching load has, therefore, increased out of proportion to the actual increase in number of students.

This increase has been made even greater by the rapid progress of technical knowledge in the various fields of medicine.

As the teaching load has increased in the clinical years, the part-time clinical faculty has been unable to meet all of the demands so that it has become necessary and advisable to secure full time men to form the hub of some of the major clinical departments. The requirements of the expanding clinical faculty has, in part, been met by the rapidly increasing available support from private agencies, such as the American Cancer Society, the Oklahoma Heart Association and others.

The increasing demand for support of the clinical departments has increased even more the problems of the Basic Science Departments. As a result, many valuable faculty members have been lost to other insti-

tutions where their teaching and research activities could be adequately supported. The increasing teaching load has therefore been borne by fewer individuals.

A careful comparison of the situation in our medical school and in those in surrounding states and in other areas of the country indicates that the salaries paid to members of the staff of the School of Medicine averages \$1,000 to \$2,000 less per year than comparable positions elsewhere. Among other departments, the differential is as much as \$5,000.

In addition to the fact that the salaries are lower than for comparable positions elsewhere, the teaching load is so much greater that the inducement of time for research is also missing. It is, therefore, obvious that in order to fill the positions now open, as well as to provide the much needed personnel, an upward revision of the budget both as to individual salaries and the number of men on the professional staffs of the various departments must be effected. In reviewing the situation, it would seem to be essential that the allocation of state funds for basic personnel must be increased. Such an increase would result in greater than the actual dollar value of the basic increase from the state, since competent research men would bring with them the potential of research grants from a variety of public and private sources.

Having generalized on the problems encountered, we will hereafter attempt a more specific analysis of specific departments. Since the problem is the most acute in the Department of Pathology at the present time, we will discuss its needs first.

Doctor Howard C. Hopps, the Chairman of the Department of Pathology, has accepted a similar position at the University of Texas, in Galveston. A second member of the department, working in clinical pathology, has accepted a position in clinical pathology in another city. The reports of Doctor Hopps as chairman of the department, and of the Advisory Committee on Clinical Laboratories at the University Hospitals, are combined to present the complex problem which will face the new department

chairman when appointed. The Advisory Committee was composed of members of the Staff of the School of Medicine and of the leading pathologists in Oklahoma City.

The Department of Pathology has three primary functions: teaching, service in the hospital, and research. The medical student begins in the second year and carries on through the senior year. In addition, there are graduate students working for Master of Science and Doctor of Philosophy degrees. The department has been developing an excellent postgraduate program, giving specialty training in pathology at the resident or fellowship level and participating in postgraduate programs for doctors in practice throughout the State. In addition, members of the staff participate in the technical training of laboratory technologists, nurses, and physiotherapists.

The program of the Department of Pathology is broader than most of the pre-clinical departments in that it also encompasses service, or clinical, functions. The chairman of the department is responsible for direction of the Clinical Pathology and Surgical Pathology Services of the hospital and the Autopsy Service for the hospital and frequently for the State.

A valiant effort has been made to develop research which serves two functions. First, in order to interest and train undergraduate medical students, graduate students, residents and fellows in research techniques, the staff has developed a program of research which permits such students to participate. In this manner, competent students and graduates are being interested in a career of teaching and research. A second, more technical, research program is pointed primarily toward the staff in an effort to obtain and hold the best possible staff within the department.

All of these functions, which have been outlined by Doctor Hopps, have been fulfilled remarkably well under difficult circumstances. A comparison of the budgetary and personnel records of the department with other departments in nearby medical centers confirms without question the inadequacies within the department pointed out

by Doctor Hopps. First, he has indicated that there are inadequate numbers of personnel. The professional staff has not been increased in proportion to the increase in teaching and service duties. The technical staff is so inadequate that relatively uneducated individuals have to be trained in highly technical procedures in order to maintain the program of the department. Second, professional personnel have inadequate time to prepare lectures, supervise laboratories and carry on other required duties. This is the inevitable result of the inadequate numbers. In spite of the need for additional teachers, every person of professional rank in the Department of Pathology finds it necessary to indulge in consultative practice in order to supplement the inadequate salary received. If adequate salaries could be paid, the consultation work could be abolished with immediate improvement in the quality of the departmental functions and a great increase in the quality and quantity of research. Third, when positions have opened up within the department, it has been difficult to attract men of high quality to fill the vacancies. Since more adequate salaries and more time for personal research are available in other medical centers, the best men are not available to us in Oklahoma. Fourth, a sufficient quantity and quality of equipment and supplies to carry out the functions of the department is not available because of the lack of adequate funds.

Doctor Hopps has, therefore, recommended that there be an increase in the budget of the department within the medical school of 25 per cent for the next biennium. After a careful evaluation of his report, we feel that such an increase would be minimal and would be adequate only to correct gross inequities in the salaries of the present professional staff and in the number of technical assistants available to the department.

The report of the Laboratory Advisory Committee outlined the gross inadequacy of the budget allocated to the Clinical Pathology Department of the University Hospital. With Doctor Floyd Keller as chairman of the committee, a detailed analysis was made of the work load in the central laboratories,

both as to theoretical gross income and as to the number of tests performed by each technologist.

The committee consulted with specialists concerning the work which might be expected from each technologist. The report of the committee was presented in greater detail than can be published here. One portion of the report should be repeated verbatim however:

"Initially the committee was startled by the magnitude of the increases in personnel and budget which became apparent it would have to recommend. The service functions performed by the Central Laboratories during 1954, was analyzed in detail. Regardless of how one analyzes these data (e.g., theoretical gross income from tests performed, number of technicians needed to meet calculated annual gross income, minimum space recommended for community hospitals with similar bed capacity), the recommendations of the committee as to personnel, space and budget are all minimal. It should be stressed that these recommendations are strictly in keeping with laboratory operational costs at our own local community level. The expansion is needed to handle adequately current service load and is in no way padded by items which might be considered to be of teaching or research luxuries."

It should be noted that although there has been a minimal increase in the budget of the department since the report of the committee, the number of tests performed by the department has increased in greater proportion. The committee recommended reorganization of some aspects of the laboratory. This reorganization has been carried out as rapidly as possible under the present circumstances.

An example of the inadequacy of the budget at the time of the committee report was the fact that the number of technicians available were less than one-half those recommended to carry out the basic functions of the department. Each section of the Clinical Laboratories was considered in this estimate. To quote only the report on two of the sections, the committee found that in the Blood Bank only 4.4 minutes were available for each examination. The time was

considered to be grossly insufficient to exercise the usual safeguards against transfusion reactions. In Bacteriology, with an average time allotment of 18 minutes per examination, the laboratories were unable to meet even the minimal desires of inspectors representing the American College of Surgeons. This deficiency resulted in constant criticism of the laboratories by all clinical departments.

As mentioned previously, the gross inadequacies of the laboratory have in part been corrected, but at the same time the work load has increased. As physicians, we all recognize the rapid strides which are being made in the diagnosis and in the determination of the best therapeutic agents for individual patients through laboratory facili-

ties. If technologists and medical students are to be properly trained in such techniques, then the support of the laboratory facilities of the University Hospitals must be adequate to produce the best facilities in the State.

The report of the Laboratory Advisory Committee and of Doctor Hopps makes it quite clear that the status of the Department of Pathology which is basic in teaching, in research and in service must be brought to the attention of the State Legislators and the Regents for Higher Education. Physicians throughout the State can be a great help in this and surely, knowing the facts, the Legislature and the Regents could not settle for less than the best let alone complete inadequacy.

The Tulsa

MATERNITY HOME *and* HOSPITAL

GEORGIA M. BOWEN

The Tulsa Maternity Home and Hospital, 7802 West 7th Street, was opened in September 1928. Located on a five-acre tract donated for the purpose by the Charles Page Foundation and built out of Salvation Army funds, according to specifications, the home, with its surrounding woodlands, beautifully kept gardens and walks, gives the impression of a spacious, dignified home rather than an institution. "Over 4,000 unfortunate mothers have found here—understanding and help at the most crucial time of their lives," reads the legend in a brochure of a few years ago.

The primary purpose as defined by Capt. Stephenson, superintendent, is to provide the best possible medical care and security for the young girl who is having a baby out of wedlock.

Most of the patients are teen-agers, girls between 16 and 19, but there have been girls younger than this average and there have been some older, the oldest on record in Tulsa having been 27.

The home is recognized and accredited. It is a member of the American Hospital Association, the State Hospital Association and the Protestant Hospital Association. It was recently made a beneficiary of the Ford Foundation, all of which bespeaks the high caliber of its medical program in its own right without the added recognition the world has learned attaches to any of the diversified services of the Salvation Army.

Col. W. W. Bouterse, commander of the Oklahoma division, Salvation Army, stresses the fact that the Tulsa Home and Hospital is a *protective service* for any girl in any county in Oklahoma in need of such service, from the most remote rural sections to the towns and cities of the state.

"Never has a girl been turned away for lack of funds to pay even a small percentage of her way," says Col. Bouterse. "We try to get the girls to pay a fee and to pay her board on a weekly or monthly basis more because it helps her retain her personal dignity and self-respect than for the money in-



The Salvation Army Maternity Home and Hospital, located six miles from downtown Tulsa, on a beautiful five-acre tract of land donated for its purpose by Charles Page, has been serving every County of the State of Oklahoma for nearly 30 years.

volved. But any physician or hospital executive knows and any homemaker operating on a budget realizes the fees asked are but a drop in the bucket on our overhead expense and maintenance cost. But again I want to emphasize we have never turned away a girl—and we never will—for want of money.”

How then is the Tulsa Home and Hospital supported, Col. Bouterse was asked. Presently, the United Fund of Tulsa carries 60 per cent of the financial load, the remaining 40 per cent being provided out of funds raised by Salvation Army Service Units in communities throughout the state.

Plans are under way to add a \$350,000 wing to the hospital, Col. Bouterse announced. “This is not to give us a greater capacity but to give us greater efficiency with an up-to-the-minute hospital wing with modern equipment for our nursery, hospital ward, delivery room and diet kitchen,” he pointed out.

The \$350,000 will be allocated for this service out of a \$1 million overall building campaign to be launched in Tulsa, probably

in February, Col. Bouterse said. The wing will be built within the year.

The Tulsa Salvation Army Maternity Home and Hospital is served by 35 Tulsa physicians, with Doctor E. O. Johnson as chief of staff. Physicians rotate their services and serve without fees. They are the same physicians who daily are taking their full-pay patients into Hillcrest or St. John’s hospitals, Doctor Johnson points out, adding “we’re constantly on the lookout for promising young interns or residents to add to our staff not only for the experience but because it is a part of their duty as Tulsa citizens to be indoctrinated into this splendid service.”

On the staff are 16 obstetricians, two pediatricians and 17 consultants, among them Tulsa’s leading specialists, eye, ear, nose and throat men, cardiac specialists, psychiatrists and all the rest of the specialties. X-ray technicians, dentists and psychologists are also available.

Deliveries are made at the hospital except where surgery, including cesarotomy, is needed. For such cases the patient is taken into one of the two leading Tulsa hospitals.

The type of care the girl receives is best epitomized in letters coming back to the home from former patients who have gone forth into a new life, married and are starting families. Many a letter is received from all parts of the state and from other states saying in effect, "I wish I could be sure of getting as good care with this baby as I got when I was in your hospital."

The medical program which will be sent to any physician interested enough to request it is given in complete detail, which can only be summarized here. The Intake Policy, of interest to every city physician, family doctor or country practitioner who may many times in his years of practice be the recipient of the unwed expectant mother's confidence reads in part: "The Salvation Army Home and Hospital exists for the exclusive purpose of providing security and the best possible medical care . . . together with a warm understanding of the emotional crises which the patient is facing. This enables us to afford her (the patient) every opportunity, while in a Christian environment, to find a new way of life and face the future with courage and strength.

"The point of intake is probably the most critical moment of establishing the proper relationship between the hospital and the unmarried mother. The girl is then full of questions pertaining to her physical and emotional well-being, illegitimate pregnancy with all the secrecy and fear with which society has surrounded it, is a major emotional shock and one from which the mother seldom recovers without some emotional scars."

Well-developed case work at intake is considered by Salvation Army homes everywhere to be of paramount importance. In Tulsa, the initial interview is not in the cold, official business-office atmosphere but in a pleasant home setting where the frightened girl is put at ease and led to talk as to a friend to whom she is moved to give her confidence. Tensions are released; tears come and the sorry story along with them and the girl is better able mentally and spiritually to face the ordeal ahead.

This is not to intimate she is under any

illusion she is on a holiday from her job or school room. None knows better than she that she has a struggle ahead for herself and for her unborn child whether she wants the child or does not (which is usually the case) but she is never pricked and prodded and reminded of her situation but is given every help in meeting it with her chin up.

Of course there are business items to go into. The Home wants girls to come in not later than the seventh month of pregnancy but many prefer to come in the fourth or fifth month or as soon as their condition becomes obvious and embarrassing at home, in school or on the job. Finances must be discussed. "When possible we ask the girl or her family to pay a fee of \$150 plus her board on a weekly or monthly basis," Col. Bouterse points out, again emphasizing, "we have never kept a girl out for want of money." Also payment may be made "on easy terms," even extending over until the girl is back to work and earning her way.

Most of the girls coming to the home are referred by the family doctor or some strange physician whom she may consult when she suspects her condition. She may in desperation tell her troubles to her minister or a Salvation Army worker, to a close friend, a teacher or employer. Or the family may find out about it and bring her to the home. Indeed, she may come of her own volition, having read or heard of this service of the Salvation Army.

Any reputable citizen may refer any Oklahoma girl who needs service, and, although an Oklahoma institution, girls from other states are often accepted, Col. Bouterse says. "By the same token, some of our Oklahoma girls who come to us later for advice prefer to go to out-of-state maternity homes for their waiting period and delivery, and we try to be equally understanding with girls from neighboring states," he says.

The girl signs the routine application form, including information on age, nationality, relation, education, etc., and if her parents know of her condition, she gives their names and address. She also states by whom she has been referred. She is given a complete physical and the following reports

are required for admission: blood type; RH factor; hemoglobin; Wasserman and smear.

The Tulsa Home and Hospital is a 25-bed institution, with 19 home beds and six hospital beds plus the isolation ward and nursery now equipped with modern receiving beds and soon to be equipped with the last word in bassinets and nursery furnishings. The Tulsa Woman's Auxiliary has already installed attractive new home beds and is refurbishing the rest of the home as its major project.

The present staff consists of eight, four of whom are Salvation Army officers. The staff is headed by Capt. Stephenson, superintendent, and the present personnel includes Maj. June Wilkerson, house mother, Capt. Bernetti Willerton, R.N., the professional assistant to the medical staff, Lt. Josephine Baker, nursery officer, Miss Betty Mahaffey, secretary-bookkeeper, Mrs. Frankie Hall, laundress, Mrs. Ruby Lee, cook, and Miss Evlean Bryce who is on night duty.

Regardless of previous medical examinations, every girl admitted is given complete pre-natal examination by the physician who will attend her. Such examinations adhere to the standards accepted by the American Medical Association.

The post-partum care is determined by the attending physician, but the girl usually remains several weeks or until she is physically, mentally and emotionally ready to resume her place in society, fortified by the spiritual uplift which is absorbed naturally and inevitably from several months in this Christian home environment and not injected forcibly against the patient's will.

Procedures incorporated in the best post-partum care are strictly adhered to under supervision of the Registered Nurse.

Concern for the welfare of the newborn child is a paramount consideration. The patient may discuss plans for the adoption of her baby when she is admitted but she is urged to take ample time to think this part of her problem through and is assured

the Salvation Army does not wish to dictate or influence but to help her in whatever plan she decides upon. The Tulsa Home and Hospital has the services of both public and private (licensed) placement agencies, and will discuss adoptions only through such recognized and accredited agencies.

The social program in the home includes crafts and hygiene classes, Bible, planned recreation and free time for shopping, movies, etc. The home has a good library service, TV and radios. There are only such house rules as are essential for peaceful living together as a family unit. Each girl must attend morning and evening devotionals which consist of Scripture reading and prayer adaptable to any faith—or no faith. And this fits all cases, since patients present Jewish, Catholic, Protestant or non-religious backgrounds. Sunday services, non-denominational, as are all Salvation Army religious services, are conducted by the staff officers, with an occasional special service by a visiting Salvation Army officer, guest minister or lecturer.

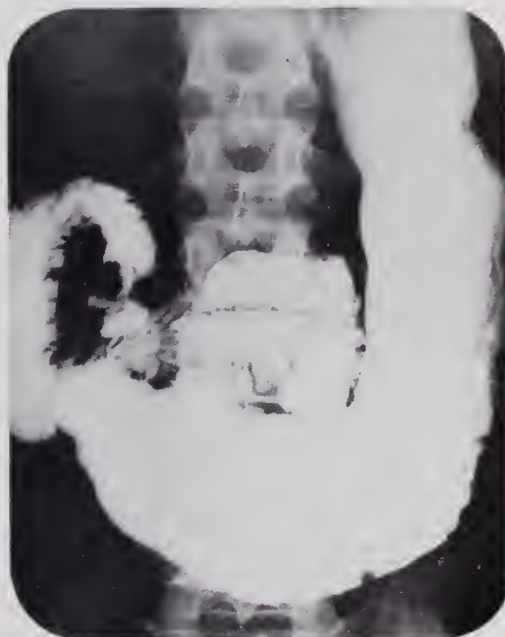
With the Tulsa Maternity Home and Hospital as a basis, a pilot study is now being made by the Salvation Army to set up a better bookkeeping and auditing system, separating the maintenance and operation costs of the home from those of the hospital. In this way it is hoped to establish soon a better standardized per capita estimate, both on living costs and patient-care. Such a study has never been made, Col. Bouterse says.

The Tulsa home is open to visitors, both those coming to visit the girls personally and citizens interested in the service to unwed expectant mothers. Oklahoma physicians have a special invitation to visit the home and hospital and are urged to write for the detailed medical program. The Tulsa Maternity Home and Hospital is confident that after such a visit and study of both the medical and social programs, they will be happy to know where they can send this type of patient and be assured she will have protection and the best of physical, emotional and spiritual care, plus an "easy-to-take" rehabilitation service.

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SEARLE

What They're Saying

The Community:

The NEW MENTAL HEALTH FRONTIER

MIKE GORMAN, Executive Director, National Mental Health Committee.

Governor Leader, Secretary Shapiro, Workshop delegates:

The fact that we are assembled here this morning to talk about community action in the field of mental health is dramatic evidence of the tremendous progress we have made over the past decade.

In 1945, when I started touring the state mental hospitals of this country as a newspaper reporter, the major job was bringing an awareness of the deplorable conditions in these hospitals to the attention of the average citizen. There was a tremendous wall between the state mental hospital system and the citizens in the community, and our early efforts were dedicated to removing this wall and convincing the people that these hospitalized patients were deserving of their deep and abiding consideration.

As you well know here in Pennsylvania, mental patients in state hospitals are no longer considered beyond the pale of concern of the citizens of this democracy. Major credit for this great awakening must go to the press and the Governors of the 48 States. You in Pennsylvania have reason to be very proud of your Governor, your Secretary of Welfare, your legislature and your newspapers for the job they have done over the past few years in bringing home to the public the need for a dynamic program to convert these mental hospitals from tenements of despair to modern therapeutic facilities.

From the time of the establishment of the first state mental hospital in Williamsburg, Virginia, in 1773 up until very recently, we were still living in what I have often referred to as "The Age of Banishment." This age is coming rapidly to a close and I think it is

THE AUTHOR

A former Oklahoma City resident, Mike Gorman, worked as a reporter on both the Oklahoma City Times and the Daily Oklahoman from 1945 to 1949. During that time he became the first newspaperman to receive the Lasker Award in Mental Hygiene.

He was cited for his outstanding contributions toward the advancement of mental health, for exposes of certain Oklahoma mental institutions and for stimulating a grass-roots citizen reform movement which resulted in improved hospital conditions in Oklahoma.

Mr. Gorman was born in New York City and received a masters degree from New York University. One of the several books he has written, "Oklahoma Attacks its Snakepit," was condensed for Readers Digest.

This is a speech made to The Bulletin Civic Service Committee, Workshop on Mental Health October 15, 1956, Drake Hotel, Philadelphia, Pennsylvania.

fair to state that we are on the threshold of a great new era—the treatment of mental illness in the heart of the community. As we have over the past several decades built a magnificent hospital and medical care system for the treatment of physical ills within the confines of our community, so shall we in the next several decades do the same for mental illness.

It is right and fitting that the community become the focal point for modern psychiatric treatment. Dr. Franklin Ebaugh, who in 1925 journeyed from the hub of the universe—Philadelphia, of course—to the wilds of Colorado to set up an intensive psychiatric hospital unit in the heart of the city of Denver, has been pointing out for thirty years that our state mental hospitals are monuments to the failure of our communities "to create the necessary conditions for the full, healthy adjustment of individual minds."

In "The Community Stake in the Mental Health Program," a brilliant address before the 1955 convention of the American Psychiatric Association, Doctor Jack Ewalt, who trained under Ebaugh, argued that the citizens of a community are directly responsible for the success or failure of any program designed to "develop a population with character strong enough and resilient enough to adjust to the demands of their particular environment."

"Behavior is a person's solution to the problem of living at that moment in the community," Doctor Ewalt told his colleagues. "Adaptation will be more constructive and will improve as the individuals within the community become more mature, and more understanding of human needs . . . Thus, persons living in a healthy community will tend to work out their problems in a healthy way."

Since this is a forum dedicated to the promotion of community action in mental health, I want to talk to you this morning about some specific community resources which must be tapped in establishing a sound foundation for the community treatment of mental disorders:

The General Practitioner

The general practitioner is the first line of defense in the community against the initial onset of mental illness. However, up until very recently he has isolated himself from psychiatry, and psychiatry has isolated itself from him. Most of the family physicians practicing today have had little or no training in psychiatry, since medical schools ignored the naughty subject in their curricula. Because the mental hospital system was out in the woods and isolated from the main stream of American medicine, the family physician felt no responsibility for the care of mental patients. As a matter of fact, he frequently refused to visit a distant mental hospital to treat patients.

With the advent of the new tranquilizing drugs, the situation has changed dramatically. The family physician today is probably prescribing more medication for disturbed individuals than is the psychiatrist.

This is a natural development. Doctor

Francis Braceland, President of the American Psychiatric Association, pointed out recently that "the key preventive agent in the entire mental effort may well be the physician in community practice, for the physician in general practice sees every segment of the population, every age group, and persons at all economic and social levels . . . In his care of expectant mothers, in his obstetric work, in his care of babies and children, he may accomplish preventive psychiatry of heroic proportions."

Echoing the Braceland theme, Doctors Fred W. Langer and Robert L. Garrard of North Carolina gave it added emphasis in a paper delivered earlier this year before the Tri-State Medical Society.

"Psychiatry offers many useful tools with which to ameliorate this situation, but it lacks the manpower to implement them adequately," they contend. ". . . The general practitioner enjoys several strategic opportunities not shared by the psychiatrist. First, because of his closeness and position of confidence with the families in his community, he is accepted as liaison officer between medicine and the community . . . Second, in the treatment of emotional disorders he maintains a position of advantage over the psychiatrist in two significant areas: he is more intimately acquainted with the patient's total environment and he sees the patient earlier in the development of the illness . . . The general practitioner has another great advantage in working with emotional illness in that he is more apt to talk the language of the patient and relatives. He usually knows the entire family and is able to ease anxiety and tension in other members who are threatened."

The North Carolina doctors concluded with a plea for increased use of this great medical reservoir:

" . . . Psychiatry is moving out of the mental hospitals and into the community, and the general practitioner will practice more and more psychiatry. The most powerful and frequently used drug in general practice is the doctor himself. None of the miracle drugs can hope to prove more powerful than the inter-personal relationship between the doctor and the patient. This

still remains the greatest single tool of psychiatry and one which is available to every physician. The wise family doctor knew this to be true before the word psychiatry was devised."

This raises several serious problems. First of all, the general practitioner must receive some post-graduate training in the handling of emotional illnesses. He must know much more about the diagnosis of the various mental illnesses, and he must learn the difficult art of proper referral to a psychiatrist.

The professional organizations in this country have been slow to appreciate the gravity of this situation. Although the American Medical Association established a Council on Mental Health four years ago, it has done little or nothing about this problem. And this despite the fact that it has been offered a superb blueprint for a national campaign to educate the general practitioner in the specialty of psychiatry.

This imaginative blueprint calls upon the American Medical Association to draw up a platform of activity to bring every state and local medical society into the fight against mental illness. Activities would include the following:

1. A proclamation from the President of the American Medical Association calling upon all affiliated state and local medical societies to tackle the mental illness problem.

2. State-wide meetings between state medical societies and state mental health authorities to:

- a. Establish mutual interest and contact between these two hitherto separated branches of medicine.
- b. To discuss the role of the general physician in using all means at his disposal to keep the patient out of the state mental hospital.
- c. To keep the family physician completely informed on the progress of any of his patients admitted to state mental hospitals or other state facilities.
- d. To work out standard procedures for the follow-up of discharged mental patients, particularly those on maintenance dosages of the tranquilizing drugs.

3. A call to every state and local medical society to arrange mental illness seminars, and to bring outstanding psychiatrists to talk to the general physicians on the newer treatments now in use.

4. A call to all state and local medical societies to emphasize mental illness at their annual meetings and Postgraduate Institutes.

5. The use of educational film, closed circuit television, exhibits and special publications to bring the busy physician the latest developments in psychiatric treatment.

While this blueprint for action has been gathering dust in the catacombs of the American Medical Association, the American Psychiatric Association and the American Academy of General Practice, the latter representing more than 20,000 family physicians, both acted at their 1956 conventions to set up committees to work together on this problem. Many of us in the field are hoping that the American Academy of General Practice, a dynamic professional organization dedicated to expanded professional training for the family physician, will move into the current vacuum and get things rolling.

On a number of occasions I have urged the American Medical Association to heed the wise words of Doctor Elmer Hess of Erie, who in 1955 told his fellow members of the American Medical Association that their number one medical problem from now on in was, and would be, mental illness. Doctor Hess proposed a 5-point program for increased participation by all physicians in the care of the mentally ill, which, because of its importance, I list here:

1. Physicians should take an increasingly active part in the development of more psychiatric units in general hospitals.

2. Physicians should give one day a week to work in state or county hospitals near their home.

3. Young physicians should be retained on a part time basis as attending staff physicians in mental hospitals.

4. Residency training programs for non-psychiatric residents should be developed in state mental hospitals. This will recruit

the other medical disciplines into mental hospital work. St. Elizabeths in Washington, and a number of mental hospitals in Illinois and Massachusetts, have already developed programs of this nature.

5. State and county medical societies should establish psychiatric consultation services for their general physician members. These services would be provided by the psychiatrists who are members of the societies. This type of consultative service would be particularly valuable in the administration of the new drugs on an out-patient basis.

The education of the general practitioner in the handling of mental illness is also a responsibility of the Commonwealth of Pennsylvania. It is in the long-run interest of Pennsylvania to educate its family physicians so that they may prevent the hospitalization of thousands of patients. Since the shortage of psychiatrists and allied personnel will be with us for at least another twenty years, it is absolutely vital that the other segments of the medical profession be educated in handling mental illness. I think the Commissioner of Mental Health of Pennsylvania has a definite responsibility to plan a series of institutes for the training of the family physician in the handling of psychiatric problems.

These institutes should be planned in consultation with state and local medical, psychiatric and general practice societies, and should preferably be held at the local mental hospital or medical school. The New York and Illinois departments of mental health have embarked on programs along these lines, and it is my understanding that a few additional states have recently joined the band-wagon.

The Psychiatric Unit in the General Hospital

Although mental patients occupy more than half of all hospital beds in this country, general hospitals accommodate less than one per cent of the mentally ill. Is it not a shocking thing that 950 large general hospitals in this country do not have a single psychiatric bed? We know this is a hold-over from the Age of Banishment, but the

time has come to place psychiatric illness alongside other comparable illnesses in the medical programs of our general hospitals.

The benefits of this type of program are many. Most important, it tears the stigma away from mental illness. When there is routine voluntary admission to a hospital for this illness, then much of the old legal voodoo goes by the wayside. Furthermore, the family of the patient is close to him and the patient doesn't feel as though he had been banished into the woods for some evil thing he has done.

Of almost equal importance is the effect such psychiatric units have upon the medical profession. For decades and decades, interns, residents and consulting physicians never saw a mental patient. Whenever psychiatric units have been introduced into general hospitals, there has been an increased awareness on the part of the general medical staff of the importance of emotional factors in all types of illness.

As the psychiatric unit in the general hospital becomes more common, it is increasingly being covered by health insurance. Remarkable progress has been made during the past five years in health insurance coverage in acute mental illness, and efforts must continue to reduce the enormous economic burden of such an illness.

Community Treatment Facilities For Children

A number of recent surveys have highlighted our failure to treat emotionally disturbed children in the early stages of mental illness. There are only 30 residential treatment centers in the country which are altogether capable of handling about 2,000 children a year. These centers have ten times as many applicants as they are able to handle; a recent study by the Child Welfare League of America put the number of emotionally disturbed children in this country at about 500,000 children.

Over the past several years, a few states and cities have completed surveys on emotionally disturbed children. The conclusions of these surveys are remarkably similar. They all conclude that the greatest difficulty is locating these sick children. They are buf-

feted about from jail to court to training school to mental hospital.

Our school systems do a very poor job with these disturbed children. According to a 3-year survey conducted under the auspices of the Columbia University Department of Psychiatry, a minimum of ten per cent of public school children are emotionally disturbed and need psychiatric help. But the majority of school systems lack the trained personnel or facilities to aid these children. For example, the Columbia survey pointed out that in our nation's schools there is one psychiatrist for every 50,000 children.

Here is a great challenge for all of you in the community. I commend particularly to the parents of the community two great challenges which can keep you busy for the next decade—the establishment of community residential treatment centers for children and the creation of well staffed psychiatric services in the schools.

More Flexible Facilities for Psychiatric Treatment

As I told the Community Mental Health Boards of New York State earlier this year, we are freighted down with an excess baggage of outmoded concepts concerning the time and place for psychiatric treatment. In America, we have been uneasy about mental illness and we have been criticized by many leaders of world psychiatry for excessive emphasis upon restraint, locked doors and long-time confinement.

Europe has much to teach us in the relaxed handling of mental patients. All of you know of Gheel, Belgium, where mental patients have been handled in the homes of the community for many centuries. In recent years, England has shown the way in tearing down the barriers which separate the mental hospital from the community.

Our northern neighbor, Canada, has pioneered in the development of day and night hospitals which keep the patient in close contact with the family and with the community. In the day hospital the patient receives active treatment during the day, but returns to the strength and warmth of his family and his community each night. Thus

there is no breaking of the ties between the patient and the outside world. We have only begun using the day hospital in this country recently. Boston Psychopathic Hospital has had one for several years and there are two now getting under way in the New York State mental hospital system.

The night hospital is an even more important therapeutic development. In this facility, the patient goes to work during the day and returns to the hospital at night for necessary treatment. I saw one in operation recently in Montreal, and I cannot convey to you how much this facility meant to the patients being treated there. They had avoided the stigma of legal commitment and they were continuing their important daily activities while receiving the basic treatment they needed. We have only a couple of these night hospitals in this country and they do not begin to approximate the Canadian hospitals.

Finally, the Mental Health Center concept has been gaining increasing acceptance everywhere but in the United States.

These Centers have been remarkably successful in Canada where they are called Well-Being Clinics. Experience gained in development of community health programs in Canada revealed a desire on the part of many of the public for an opportunity to obtain a routine check-up for their mental health similar to the opportunity provided in the field of public health for physical check-ups. All those registered for Well-Being clinics receive a periodic mental health check-up. A rating scale covering the more important areas of personal and social adjustment is used. If the person presenting himself for a check-up is found to have serious emotional problems, he is referred to a psychiatric resource for further aid and treatment.

This mental health center development has enormous possibilities. There is only one functioning in this country today. It was started a year ago in Lafayette, Louisiana, on a pattern laid down by the American Psychiatric Association.

Rehabilitation

As your own Doctor Kenneth Appel has pointed out time and time again, the com-

munity is doing an exceedingly poor job with the discharged mental patient. Although the state mental hospitals discharge approximately 250,000 patients each year, only a small fraction of these are rehabilitated and returned to productive employment. The U.S. Office of Vocational Rehabilitation recently released figures through June 30, 1956 indicating that only about 3,000 of the approximately 66,000 persons rehabilitated during the previous year were mentally handicapped.

The average mental patient discharged from a state hospital returns to a community which is almost totally indifferent to his needs. We have a few token efforts like Fountain House in New York City, but for the most part, we have failed to provide the community facilities needed to bolster these discharged patients. Other countries have developed Half-Way Houses and Residential Sheltered Workshops for these patients, but in America we have not even begun the construction of major facilities of this type. No wonder we have such a high rate of relapse and return to mental hospitals; considering the total indifference of the community, it is really surprising that the relapse and return rate isn't much higher.

All of the resources cited above must be strengthened if we are to return psychiatry to the community. In a recent speech Doctor Daniel Blain, Medical Director of the American Psychiatric Association, stressed the importance of these resources in the following words which I commend to all of you:

"Most of these efforts are in the direction of reaching toward the onset of the illness, to get nearer home, to utilize the resources of the community, to stimulate social forces, the motivating elements, and apply them to the use of the healing process. We would hope that residential units would be less and less necessary. That earlier community effort would care for more and more and actively prevent hospitalization. That days spent in hospitals would be reduced. We can do this now for all categories except the aged. Even with the aged we can delay and defer the time for entering an institution, just as we have so successfully deferred, but never prevented, death. The hospital

must and is already receding as the only locus of psychiatric treatment. It is gradually merging with other forces actively at work in dealing with disease.

"The hospital, however, cannot relinquish its paramount position until community clinics, mental health centers, home care and follow-up, screening and referral centers, more private practitioners, families and schools, social conditions and all the other assets of a community are developed."

It is gratifying to note that the states are on the march in the provision of tremendously expanded community mental health services. In a survey completed in November, 1955, the Council of State Governments reported that many states had doubled, and in some cases tripled, their appropriations for community mental health services. As all of you probably know, New York has led the way with a new community mental health services program which is currently budgeted at approximately \$13,000,000. Under the New York program, the state offers matching monies to local communities which agree to expand their psychiatric services in schools, the courts, general hospitals, etc. Ohio, Illinois, Indiana, North Carolina, and Washington are among the states which have inaugurated greatly expanded community mental health services.

I am pleased to note that you are on the move here in Pennsylvania, too. You have unified your mental hospital system and you are now ready to move on a state-wide scale. The action of the Pennsylvania legislature in appropriating more than one million dollars for psychiatric clinics for children and more than \$4,000,000 in state aid for clinics and treatment centers in general hospitals promises much for the support of community mental health services in Pennsylvania.

You have a great deal to be proud of here in Philadelphia. Your Department of Public Health has a Division of Mental Health headed by a full-time psychiatrist. As far as I have been able to ascertain, Doctor Maurice Linden, the superb psychiatrist who heads the Division of Mental Health here, has the only job of its kind in any major American city. In his job function is wrap-

ped up much of the future of American psychiatry, for his unique and basic task is the creation of community mental health services at the local level. During the next decade, I am sure that many large cities will emulate Philadelphia in creating a division for the support of psychiatric services in the local community.

There is one final thought I would like to leave with you. Many of these community mental health services look very good in the blueprint stage but they become effective only when you, the citizens, participate in them and give them your full support. No

Medicare Program Starts

Friday, December 7, saw the beginning of the Dependent's Medical Care Act, Public Law 569. The purpose of the Act is to "create and maintain high morale throughout the uniformed services by providing an improved and uniform program of medical care for members of the uniformed forces and their dependents."

Under the Act, those who are eligible for medical care include the dependents of: members of the uniformed services, retired members, and persons who died while either active or retired members of the uniformed services. The only ones eligible to receive care from civilian sources, however, are spouses and dependent children of persons on active duty. Care in Military facilities only is authorized for unremarried widows or widowers and children of deceased or retired members, if they were dependent at the time of the spouse's death.

At the outset of the program spouses and children of active duty members will have free choice between civilian and military care. However, this limitation can be invoked later if it is shown that use of civilian medical facilities by dependents in a certain area has adversely affected the optimum economic utilization of service facilities, the Secretary of Defense may restrict dependents in that area to care in a service facility.

Dependents will be identified by a "De-

community psychiatric unit, whether it be in a general hospital or in a school, can be really effective unless it is constantly challenged by an enlightened citizenry. In the final analysis, you will decide the services you want for yourselves and your children, and you are in no position to criticize the professional groups for not providing these services. This forum here this morning is eloquent affirmation of your deep interest in a better day for the mentally ill, and it augurs well for the future of community mental health services in both Philadelphia and the rest of Pennsylvania.

pendents' Authorization for Medical Care" card later on in the spring (before July 1). In the meantime, physicians may accept post exchange cards, combined post exchange-commissary-military medical care card or the standard military dependent identification card as proper identification. None of these may be accepted after the special purpose card is issued. Physicians are cautioned to be certain that the person presenting the card is actually the dependent.

Several Cases Reported in Oklahoma

Since the implementation of the law, a large number of dependents have reported to private physicians' offices for medical care. It is anticipated that many questions will arise within the next few months regarding the interpretation of the law. For that reason, the OSMA Committee on Medical Service, Hospitals and Prepaid Insurance will continue to work on this program and issue supplemental information to the medical profession.

Fee Schedule to Be Distributed

H. H. Macumber, M.D., Chairman of the OSMA Committee, reports that a manual containing an explanation of the law and a fee schedule will be mailed to each physician in the state as soon as they can be printed, probably around January 15. Doctor Macumber urges every physician to read the manual carefully in order to minimize errors in the handling of cases.

Association Activities

Draft To Take 15 State Doctors

Fifteen Oklahoma physicians will be inducted into the Army or Air Force in February, Selective Service recently announced. The Oklahoma quota is representative of the largest national call since March, 1955, when the Army, Navy and Air Force took 1,275.

Selective Service plans to induct 450 physicians in the February call, 250 for the Army and 200 for the Air Force. In all probability the current call will be the last one before the Doctor Draft Law expires, July 1. The Defense Department has indicated that it would not ask for another extension of the law.

Since the program went into effect in 1950 with the outbreak of the Korean War, the special draft has brought 10,337 physicians into the services.

Three Meetings Per Day At O.S.M.A. Headquarters

There was much activity at the OSMA State headquarters building, Sunday, December 16, when three of the Association's Committees held meetings.

Committees meeting were: The Grievance Committee and the Committee on the United Mineworkers Welfare and Retirement Fund, both of which convened at 10:00 a.m.; and the Insurance Committee which began its session in the afternoon.

The Association's liability insurance was the topic for discussion at the Insurance Committee's meeting. Members of the Committee heard Mr. John Parish, Secretary of the Saint Paul Mercury-Indemnity Company, give a report on the present status of the group malpractice insurance program.

Doctor George Brother, Regional Medical Director of the United Mineworkers, was another out-of-state guest who participated in the day's activities. He had been invited by the OSMA committee in order to clarify policies of the U.M.W.A.'s medical care program as it effects the practice of medicine in the mining areas of the State.

Public Health Association To Meet in Stillwater

"Public Health, A Community Problem" will be the theme when the Oklahoma Public Health Association holds its sixteenth annual meeting, January 9, 10, and 11, on the Oklahoma A & M Campus, Stillwater. All sessions will be held at the Student Union Building.

Glen Earley, President of the Association, announced that an excellent program has been arranged, featuring several outstanding out-of-state personalities as well as a representative group of speakers from health agencies in Oklahoma. Among the out-of-state speakers will be Jack C. Haldeman, M.D., Chief, General Health Service of the U.S. Public Health Service, who will speak about "An Effective Public Health Program" and Edgar J. Forio, Vice President of the Coca Cola Company, whose address will be, "The Pulse of the Public."

Don Blair, Associate Executive Secretary of the Oklahoma State Medical Association, will moderate a panel discussion, entitled "The Voluntary Health Agency—Its Part in Solving the Community Health Problems."

Standard Insurance Reporting Forms Being Widely Used

The recently adopted Standard Insurance reporting form is receiving excellent acceptance by Oklahoma physicians according to Basil A. Hayes, M.D., Chairman of the OSMA's Insurance Committee. "Nearly six hundred pads containing fifty forms each have been requested by physician members," Doctor Hayes reported.

On December 1, the Committee asked the doctors of Oklahoma to begin using the standard form in an effort to relieve the medical profession from the time consuming task of deciphering the multitude of forms which are now in use. The pads of forms may be ordered from the Transcript Company, Box 191, Norman, Oklahoma, at 75 cents each; six for \$3.90; or twelve pads for \$6.

A.M.A.'s 10th Clinical Meeting Held in Seattle, Washington

Attending the 10th Clinical Meeting of the American Medical Association in Seattle, Washington, representing the Oklahoma State Medical Association were: Doctors Wilkie D. Hoover of Tulsa, Malcom E. Phelps, El Reno and E. H. Shuller, McAlester. Doctor Hoover and Doctor Phelps represented the Association as Delegates, and Doctor Shuller as an Alternate. Also attending the Conference were: Doctor John F. Burton of Oklahoma City, a member of the Council on Medical Service of the American Medical Association, and Doctor Frank L. Flack, President of the Tulsa County Medical Society, Doctor G. R. Russell, President-Elect of the Tulsa County Medical Society and Doctor Marshall O. Hart, also of Tulsa.

Among the principal matters of business to be brought before the House of Delegates were: Recommended revisions of the Code of Medical Ethics, Veterans' Medical Care, Radioactive Isotopes, Continuance of the AMA Interim Session, Hospitalization of Patients with Alcoholism and a report from the Committee on Medical Practices.

Medical Ethics

Probably the subject of greatest interest at Seattle was the proposed revision of the Principles of Medical Ethics, originally submitted in June of 1956. The proposed short version of the Principles was submitted by the Council on Constitution and By-laws, but the House of Delegates decided to refer the matter back to the Council for further study and consideration.

Out of the general discussion on the proposed revisions, opinion seemed to be predominate that more specific attention and study needed to be given to sections 6 and 7, which covered: divisions of fees, dispensing of drugs and appliances, corporate practice of medicine, and greater emphasis concerning the relationship between physicians and patients.

Veterans' Medical Care

The House revised AMA policy on Veterans' medical care by endorsing in principle the following paragraph suggested by the Council on Medical Service:

"With respect to the provision of medical care and hospitalization benefits for veterans in Veteran Administration and other federal hospitals that new legislation be enacted limiting such care to veterans with peacetime or wartime service whose disabilities or diseases are service-incurred or aggravated."

This action eliminates the temporary exceptions which were made in the June, 1953, policy regarding wartime veterans who are unable to defray the expenses of necessary hospitalization for non-service connected cases of tuberculosis or psychiatric or neurological disorders. In making the policy change, the House approved this supplementary statement:

"We recognize the laws and administrative extensions of the law that are now in operation. We feel that under the circumstances it will be to the best interests of the public in general, and veterans in particular, if medical societies, county and state as well as national, develop committees to assist in guaranteeing VA hospital admission to service-connected cases. While the present law exists, we should help assure that veterans whose illness constitutes economic disaster will not be displaced by those suffering short-term remediable ills, which at the worst, constitute financial inconveniences."

In another action concerning the veterans, the House passed two resolutions condemning as unlawful the practice of Veterans Administration hospitals which admit patients who are covered by workman's compensation insurance or by private health insurance and which render bills for the cost of their care. Both resolutions requested the AMA to take action to bring about a discontinuance of such practices by VA hospitals, and one of them instructed the Association Secretary to obtain from each state testimony or records of each known case that violates VA Reg. 6047-DI.

Radioactive Isotopes

The House rescinded the June, 1951, action which limited the hospital use of radium and radioactive isotopes to board-certified radiologists, by approving a new policy statement which says:

"(1) In any hospital in which a pa-

tient is to receive radium or the products of artificially produced isotopes, there should be a duly appointed Committee on Radium and Artificially Produced Radioisotopes of the hospital professional staff. This committee should include, but not necessarily be limited to, the following qualified physicians: a radiologist, a surgeon, an internist, a gynecologist, a urologist and a pathologist. This committee should have available such competent consultation of other physicians and scientific personnel as may be required by it. Where this is not practicable, the hospital staff should consult the nearest Committee on Radium and Artificially Produced Radioisotopes.

"(2) In any hospital, the use of radium or its products and artificially produced radioactive isotopes for diagnostic or therapeutic purposes shall be restricted to qualified physicians so judged by the Committee on Radium and Artificially Produced Radioisotopes of the professional staff to be adequately trained and competent in their particular use.

"(3) It is recommended that procurement, storage, dosimetry control and inventory of all radioactive isotopes for the use of the hospital staff and radiological safety control be centralized, and, where administratively possible, centralization be located in the department of Radiology.

"(4) It is recommended that the Board of Trustees assign to the appropriate council or committee the continuous study of the problem of radiological safety control in the use of radium and its products and artificially produced Radioactive isotopes for diagnostic or therapeutic purposes."

Clinical Meetings

Numerous resolutions were introduced recommending the discontinuance of the Interim Session, however, upon debate in the House of Delegates, a Reference Committee report was adopted which, in substance, acknowledged the public relation value of the meeting, inasmuch as it can be held in smaller cities than the Annual Meeting, and the Reference Committee further recommended to the Board of Trustees of the AMA that they consider the advisability of

holding a meeting of the House of Delegates in the fall of each year in Chicago with a scientific session being held elsewhere in the United States.

Hospitalization for Alcoholics

The House of Delegates approved a statement submitted by the Board of Trustees that Hospital Administrators, and the staffs of hospitals look upon alcoholism as a medical problem and to admit patients who are alcoholics for treatment, such admissions to be made after due examination and investigation of each individual patient, and that this action be brought to the attention of the Council on Medical Education and the Joint Commission on Accreditation of Hospitals and the American Hospital Association.

Committee on Medical Practices

A report of the Committee on Medical Practices studying the relationship of physicians with hospitals and particularly as to staff privileges was amended by the House of Delegates as follows:

"The AMA representatives on the Joint Commission on Accreditation of Hospitals be instructed to stimulate action by that body leading to the warning, provisional accreditation, or removal of accreditation of community or general hospitals which exclude or arbitrarily restrict hospital privileges for generalists as a class regardless of their individual professional competence where such policies adversely affect the quality of patient care rendered. Any action taken should be only after appeal to the Commission by the County medical society concerned."

Miscellaneous Actions

Among many other actions on a wide variety of subjects, the House of Delegates also:

Instructed the Board of Trustees to accentuate cooperation between the American Medical Association and the American Bar Association to the end that a bill of the *Jenkins-Keogh* type be enacted at the next session of Congress.

Urged all physicians to participate actively in the formulation of medical policy for *prepaid medical care plans* which are under physician direction or sponsorship.



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Plans Begin for Public Assistance Medical Care Program

Work is now underway at Federal and State levels on a new and permanent medical care program, authorized by the last session of Congress, that can result in as much as \$200 million in U.S.-State funds being paid annually to physicians, dentists, nursing homes, hospitals and druggists. It is a revised medical care plan for the benefit of some 15,000,000 persons, three per cent of the total population who received public assistance. Money used to make this program possible will be half federal and half state.

Federal and State funds presently provide some degree of medical care to public assistance recipients in the four categories authorized to receive Federal welfare aid. The categories are: old age assistance, dependent children, the blind, and the totally and permanently disabled. The amount, spent, however, varies within the states, and the overall system is irregular. Each State decides how much medical care to provide and whether to give "medical care dollars" as part of monthly assistance checks, or to make payments to the vendors of medical services.

New Funds Earmarked

Medical care funds furnished under the new program, which goes into effect on July 1, 1957, must be paid to the vendors or their agents by the states, and must be kept separate from money used for public assistance checks.

Each state will decide on the methods for contracting with and reimbursing the physicians for their services.

In Oklahoma, the Department of Public Welfare has asked the Oklahoma State Medical Association to make recommendations regarding the implementation of the program. A committee has been appointed, headed by C. M. Bielstein, M.D., to make a comprehensive study of the program and draft a suggested plan for its implementation.

Serving on the Committee with Doctor Bielstein will be: John F. Burton, M.D., Oklahoma City, A. T. Baker, M.D., Durant, Hugh Perry, M.D., Tulsa and T. E. Rhea, M.D. of Idabel.

Blue Shield Director Named To Mental Health Post

N. D. Helland of Tulsa was elected President of the Oklahoma Association for Mental Health, during the business session of the Sixth Annual Meeting, Friday, December 7, which was held in Oklahoma City.

Mr. Helland, Director of Oklahoma's Blue Cross and Blue Shield Plan, was elected to the Presidency of the Oklahoma Association for Mental Health. Paul Benton, M.D., also of Tulsa was elected first Vice President, W. Max Chambers, Ph.D., Edmond, was elected second Vice President, Thurman White, Ph.D., Norman, was elected third Vice President, Reverend Robert Main, Seminole, was elected Secretary and Mrs. Paul Dudley, Oklahoma City, was elected Treasurer.

Mr. Helland has long been active in civic leadership, and was a member of the State Board of Directors prior to accepting the Presidency. Doctor Paul Benton, Director of the Children's Medical Center, Tulsa, is a long time member of the State Board of Directors and has served actively this year on the Association's Executive Committee. He is also a member of the Research Committee of the Oklahoma Medical Research Foundation. Doctor Chambers is President of Central State College at Edmond, and is a long time leader in Oklahoma's mental health movement. He has for many years been a member of the State Board of Directors, Executive Committee and has given leadership to the scholarship committee for the promotion of interest in mental health through teacher and lay citizen participation in mental health workshops.

Doctor Thurman White is Dean of the Extension Division of the University of Oklahoma. Rev. Robert Main is Pastor of the First Methodist Church, Seminole and has been a member of the State Board of Directors for several years. Mrs. Paul Dudley, Oklahoma City Civic Leader is a member of the State Board of Directors and President of the Oklahoma County Association for Mental Health. Elected to the State Board of Directors during the meeting were: Rev. Robert Main, Thurman White, Ph.D., Mr. N. G. Henthorne, Jr. of Tulsa and Mr. Ed Loranger also of Tulsa.

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Emergency Care for Servicemen Not Effected by Medicare

The implementation of the Dependents' Medical Care Act in no way affects the policies of the various branches of the Military in paying medical expenses for members of the service who are on active duty, it was recently announced by Major George Oliver, M.D., Tinker Field. Payment will be made by the Government to civilian physicians and medical facilities for care rendered members of the military service.

Doctor Oliver pointed out that it has been the experience of the military that some patients have been "unwisely transferred" to military hospitals while in critical condition. "It is hoped that by clarifying the procedures necessary to obtain payment for services rendered, the number of such cases can be decreased," he added.

The following information is required for processing of claims:

Administrative Data

Name, rank, serial number, organization, and duty status of the patient if known. (Obtain from individual.)

Diagnosis

Diagnosis for which patient was treated, and the surgery performed if any and the date on which performed. Charges for first-aid or emergency treatment will state the exact nature and dates of the services rendered.

Room and Board

Date of admission, date of discharge, total number of days, charge per day, and total charge.

Operating Room

Charges for use of operating room will carry notation to indicate whether or not it includes administration of anesthesia and if so, type of anesthesia and whether administered by a member of hospital staff. If not, charges will be billed separately in the name of the person administering same.

X-Rays

Size and type of views, the anatomical location, number of views, charge for each, and the date taken.

Laboratory

The number and kind of tests made, the date on which made, and charge for each. Where a flat rate is charged, the statement will show what tests or examinations were included in the flat rate.

Special Medicines

Special medicines will be itemized showing quantities furnished and charge for each. Information will be furnished to show whether the medicines were from hospital stock or purchased on prescription, copies of the prescriptions with the receipted bill of druggist showing payment by the hospital will accompany the statement.

Nursing Services

Charges for private nursing services will indicate place where service was rendered, period of service, showing the hour it began and ended, the numbers of hours served each day or night, the rate per day or night, and number of days or nights served.

Special Services

Special services not furnished by hospital, such as consultants and surgeons, should be separately invoiced by individual rendering the service, showing service rendered, dates on which rendered, and reason for administering the special service.

House and Office Calls

Location, date and charge for each visit will be listed chronologically. Where more than one call is made in one day, calls will be listed as first visit, second visit, etc.

Ambulance Service

If the physician or hospital involved will submit this information in triplicate to the nearest military medical facility, vouchers will be prepared and returned for signature only. When these signed vouchers are received, payment will be made with the least possible delay.

"The military is more than happy to take care of its own, but if a member of the military should come under a private physician's care, he is earnestly requested to provide the best available medical care," Doctor Oliver said. "Consultants, specialized treatments, special medicines, and laboratory procedures should be utilized to the fullest," he continued, such care from civilian sources is fully authorized and expenses arising from such care will be paid by the government.

Doctor Oliver further clarified the billing procedure by stating that physicians will bill the nearest comparable Military Service installation (Army, Navy or Air Force) for medical care for active duty personnel.

In the case of ambulance service, any installation may be billed regardless of whether Army, Air Force, or Navy personnel are involved.

Deaths

WILLIAM E. SEBA, M.D.

1884-1956

William E. Seba, M.D., died November 28, at the age of 72, in Leedey.

He was born in Bland, Missouri, January 15, 1884. Doctor Seba attended St. Louis College of Physicians and Surgeons from which he graduated in 1905. He had practiced in Leedey for 49 years, and in the late 1920's had served as Mayor of Leedey. At the time of his death Doctor Seba was Dewey County Health Officer.

In April of 1953 he was awarded a Life Membership in the Oklahoma State Medical Association. He was a member of the Methodist Church in Leedey.

Doctor Seba is survived by his widow and two sons.

JAMES H. NEAL, SR., M.D.

1884-1956

James H. Neal, Sr., M.D., 72, died November 29, at his home in Tulsa as a result of a heart condition.

He was born in Charleston, Arkansas in 1884. After graduation from the University of Arkansas School of Medicine in 1912 he practiced in Arkansas before moving to Tulsa, and had been in Tulsa for 30 years.

He was associated with the Tulsa City-County Health Department for many years, resigning last March because of ill health.

Doctor Neal was awarded a life-membership in the Tulsa County Medical Society in September of 1956. He was a member of the Catholic Church, and a fourth degree member of the Knights of Columbus.

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ISAAC WESLEY BOLLINGER, M.D.

1889—1956

Isaac Wesley Bollinger, M.D., 67 of Henryetta, died on November 28, after a prolonged illness.

He was born on May 1, 1889. After graduation from the University of Arkansas School of Medicine in 1912, he served his internship in Little Rock, Arkansas at the Logan Roots Memorial Hospital, settled in Henryetta in 1916, and was in continuous practice there until his illness and death.

He was a specialist in Industrial Surgery, and built and operated the Henryetta Hospital. Doctor Bollinger was a member of the Oklahoma State Medical Association, and was a member of the council at the time of his death.

Business establishments in Henryetta were closed the afternoon of Doctor Bollinger's funeral in respect for his many civic activities. He was a member of the 32nd Masonic Consistory in McAlester, The Shrine in Muskogee, the Blue Lodge in Henryetta, and was a member of the First Baptist Church. He is survived by his widow, two sons and a daughter.

CHARLES L. CALDWELL, M.D.

1902—1956

Charles L. Caldwell, M.D., Tulsa, died of a heart attack at his home on November 15 at the age of 54.

He was born in Bolivar, Missouri, April 27, 1912. Following graduation from Washington University School of Medicine in St. Louis in 1928, he served an internship at St. Louis City Hospital.

Doctor Caldwell began his practice in Chelsea where his father was a pioneer physician. His career was interrupted while he served in the navy during World War II. At the time of his discharge he held the rank of Lt. Commander.

He was a Staff Member of Hillcrest Medical Center and St. John's Hospital. He was a member of the Tulsa County Medical Society and The Oklahoma State Medical Association.

Oklahoma County Passes Resolution Condemning VA Hospital Policies

A resolution, introduced in October, condemning admission policies of the Veterans Administration Hospital in Oklahoma City, was passed by the Oklahoma County Medical Society at its meeting on December 10. The original resolution (November *Journal*) was only altered slightly by the resolutions committee where it was initially referred by Elmer Ridgeway, M.D., President of the County Society.

Resolution Widely Publicized

Final action on the resolution brought front-page newspaper threats from Post 35 of the American Legion and the Veterans of Foreign Wars organizations, who opposed the physicians' resolution and supported the policies of the VA Hospital. Specifically, both organizations have countered the medical Society's action with proposals that they will favor and support legislation for socialized medicine as well as petition Congress to draft more physicians into federal service.

Doctors Answer Threat

In answer to the actions of the Veterans Administration, medical authorities reiterated their stand on the controversy, stating that their resolution was "in the interest of protecting the taxpayers of the United States, of which there are many small ones and many of them veterans, from unwarranted expenditures of their tax dollars for the care of veterans who can, due to their own station in life or having prepaid medical and hospital insurance or workmen's compensation, pay their own way."

Ninety Percent of Doctors Are Veterans

Also, the physicians pointed out that their own organization probably contained a higher percentage of veterans than any other group. A survey of the Oklahoma County membership indicated that ninety percent had served their military obligations.

Reaction to the resolution is not limited to local interest. Since its passage, there have been many other medical organizations who have adopted similar resolutions, or resolutions supporting the Oklahoma County action. *Medical Economics*, a well known na-

tional publication, is now planning an article concerning the Oklahoma City controversy.

Negotiations Planned

Doctor Ridgeway reports that plans are now underway to call together representatives of interested organizations in an effort "to resolve our differences without the medical society being forced to effect an ultimatum. It is our sincere feeling that everyone concerned is, in reality, trying to achieve the same goal of providing the best medical care possible to veterans who are really qualified to receive such care." A representative of the national office of the American Legion will be asked to meet with representatives of the County Society, Post 35 and the local Veterans Administration Hospital.

Final Resolution

The resolution finally adopted by the Oklahoma County Medical Society is reprinted below.

RESOLUTION

WHEREAS, we, the members of the Oklahoma County Medical Society as citizens and taxpayers are aware of an ever increasing tax burden,

AND WHEREAS, as physicians, interested in the proper medical care of veterans with service connected disabilities as well as the indigent veteran with non-service connected disabilities observe that money in increasing amount is being improperly used for the care of veterans who are financially able to pay for medical and hospital care,

AND WHEREAS, the Will Rogers Veterans Hospital collects fees for medical, surgical and hospital services rendered to patients covered by Workmen's Compensation Liability and private sick and accident insurance which practice results in direct competition to private hospitals and medical personnel of this community,

AND WHEREAS, it is manifestly evident that patients who have non-service connected disabilities and carry Workmen's Compensation Liability or adequate sick and accident insurance are able to pay their own expenses through such coverage are not what might be described as medical indigent and are not clearly eligible for veterans hospital and medical care according to the intent of the law,

AND WHEREAS, this practice of Veterans Hospitals in admitting patients who have such adequate insurance coverage is not only a plain violation of the Veterans Act but can be considered a definite violation of the ethical principles governing the practice of medicine as outlined by our separate organizations, the Oklahoma County and State Medical Associations in May 1956 and the American Medical Association one year ago through resolutions wherein these organizations condemned the practice of Veterans Hospitals accepting money from patients able to pay for their treatment,



Ray E. Brown, immediate past President of the American Hospital Association (left) congratulates Jack Shrode (center) and Karey Fuqua upon their election to the offices of President and President-Elect, respectively.

Hospital Association Elects New Officers

At its Annual Meeting in Oklahoma City, the Oklahoma Hospital Association installed Jack Shrode as its President for 1957. Mr. Shrode is Administrator of Wesley Hospital in Oklahoma City.

Other officers elected were: Karey Fuqua, Lawton, President-elect; Celeste Kemler, Ada, Vice President; R. L. Loy, Oklahoma City, Secretary; and Kenneth Wallace, Tulsa, Treasurer.

AND WHEREAS, continuation of this abuse will not only ultimately weaken the effectiveness of medical care of the worthy veteran but is furthermore not in conformity with the best principles of good medical practice which by tradition hold the principle that hospitals shall not engage in the practice of medicine,

AND WHEREAS, efforts of the Dean's Committee for the Veterans Administration Hospital to correct or curb these abuses and violations to the Veteran Care Act and these principles of medical ethics have so far found to be ineffective,

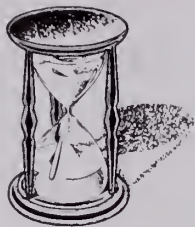
BE IT KNOWN, that the Oklahoma County Medical Society, although it feels keenly its responsibility to continue in the care of the veterans suffering from service connected illness as also the truly indigent veteran with non-service connected disability, believes it holds not only an obligation to the medical profession but also to these worthy veterans as well as the taxpayers that if this practice is continued to consider it unethical for their member physicians to participate further in the care of such unqualified patients who should be admitted for care by the Will Rogers Hospital.

BE IT RESOLVED, that the Will Rogers Veterans Hospital be given 90 days to correct these flagrant violations of the Veterans Care Act and to the ethical principles of medical practice to the satisfaction of the Oklahoma County Medical Society,

BE IT FURTHER RESOLVED, unless correction is made within 90 days, those member physicians who continue to participate in this program of Veteran Care as presently outlined will by the Oklahoma County Medical Society be considered as practicing unethical medicine and appropriate action by the Society will be taken that may lead to suspension from the rolls of the Society,

BE IT FURTHER RESOLVED, that a copy of this resolution be sent to the Veterans Administration in Washington, D.C., Senator Robert S. Kerr, Senator Mike Monroney, Congressman Teague of Mississippi, Congressman Edmundson of Oklahoma, the Medical Center Committee of the Chamber of Commerce, the managing Editor of the *Daily Oklahoman* and the *Oklahoma City Times* and all other interested parties in order that the widest publicity possible be accomplished so as to acquaint the public of this wrong.

25 Years Ago . .



From the *Journal* of the Oklahoma State Medical Association, January 1932. Edited by John Matt, M.D.

POST-OPERATIVE CARE OF THE PATIENT

C. K. Logan, M.D.
Homer

"Too many surgeons forget that their work and responsibility is only partly over when they have finished operating. Many an excellent operator is an indifferent post-operative fighter and many an excellent operation is in vain because it is needlessly lost in the convalescent room. It is often the case that a well performed operation will have a long, painful, dangerous convalescence and an imperfect result, while a poorly done, rather bungled operation will have a safe and speedy recovery with a perfect result due to post-operative care

"The average case operated under any general anesthetic wakes up with three prominent symptoms: nausea, thirst, and pain. Nausea may be present in other cases when there are various symptoms apparent, but in a post-operative case there is usually accompanying the nausea a feeling that no medical term describes. There is a general depression that one of my patients described to me as a kind of "soul sickness." Drugs and drinks do little to settle this nausea. Unless contraindicated because of some gastro-intestinal operation a gastric lavage in the form of a glass of warm water given as fast as the patient can drink it is often very helpful. It is promptly vomited up with usually some relief

"Dehydration follows most operations and is felt more by thin patients than by the plethoric type. The fundamental physiological principles to be remembered is that water is not absorbed by the walls of the stomach, nor to any great extent until it reaches the colon. In patients where nausea persists after drinking considerable water by mouth, the thirst is not alleviated. This condition is understood by most surgeons and too often we order a proctoclysis and let it go at that. If we would take time to investigate we would be surprised how often we are disappointed by this process, and how often we have only a wet bed and no results. In border line cases where treatment of dehydration is not too imperative, I prefer retention enemas, but in any serious case hypodermoclysis is the method of choice. For this purpose ordinary tap water, sterilized, is the water of choice

"Hiccough is often a very troublesome complication. It is of some importance in peritonitis and serious cases of abdominal surgery

"In my own experience and in the experience of two surgeon friends, who are fortunate enough to have more surgery to do than I, I have found that the use of a very simple remedy suggested to me by a colleague, Dr. J. J. Fraley, has been more useful than any found in my text books. The treatment that he recommended to me was oil of cassia (oil of cinnamon), one drop on a small piece of lump sugar, every fifteen minutes until the patient is relieved. In my own cases and the cases of two other colleagues to whom I have passed it on, this has been the most effective treatment. . . .

TETANUS, THE DIAGNOSIS, PREVENTION AND TREATMENT

John Haynie, B.Sc., M.D.
Durant

"Your attention is respectfully invited to a brief study of tetanus. This paper is presented in the belief that insufficient attention has been given by the general practitioner to the earlier symptoms, necessary prevention, and maximum antitoxin treatment. . . .

"The diagnosis should be made early for the success of the treatment depends upon the prompt recognition of the disease. If doubt exists, cultures should be made from scrapings of the wound, but delay is fraught with grave danger. I have known cases and you have too that have not been recognized early and the proper treatment instituted in time to save the life of the patient. . . .

"Tetanus may resemble strychnine poisoning, tetany, hysteria, and hydrophobia. . . .

"The prognosis of tetanus has been a serious chapter in medical history. It has caused an appalling death rate with a mortality hitherto of almost 100%. But with proper treatment the mortality of acute tetanus has fallen to about 70% or 75%. The shorter the incubation period the more unfavorable the outlook. If the patient survives six to eight days, recovery usually takes place. When the diaphragm and laryngeal muscles are greatly involved, the prognosis is unfavorable. Death usually takes place by asphyxiation, respiratory paralysis, toxemia, cardiac dilation, or bronchial pneumonia. . . .

"A case of tetanus is a serious reflection on the carelessness or oversight of some one, and too often this is traced to the physician. The most effective treatment of this disease is prevention. Every wound should be opened to its deepest parts, thoroughly cleansed, all devitalized and highly traumatized tissue dissected away, and all foreign materials removed: then the wound should be thoroughly swabbed with tincture of iodine, which is most lethal to the toxin and tetanus spores. Fifteen hundred units of antitetanus serum should be injected immediately intramuscularly as a prophylactic measure in all wounds of suspicious character. The system rapidly eliminates the antitoxin, 66% being thrown off within six days and 80% at the expiration of twelve days; therefore, as long as danger exists, especially in slowly healing and suppurating wounds, the serum

should be repeated every seven to eight days. "As a prophylactic measure tetanus antitoxin merits our fullest confidence." . . .

"All cases should be isolated, and physicians and attendants should use proper precautions in handling them. The use of rubber gloves and other protective methods should be taken, especially in dressing the wound and handling contaminated dressings. It is of the utmost importance that a quiet, dark room be secured with a limited number of sensible attendants in charge and that they be instructed in all details for the care and comfort of the patient. It is essential that everything be well organized and nothing left to chance. The physician must challenge the attack with heroic measures before much damage is done to the nerve cells . . .

"Antitetanic serum is an imperial and sovereign remedy. But after the nerve cells are damaged by the toxins it can do but little good. Therefore, it is of vital importance that the antitoxin be given early, for, in so doing, it neutralized the toxins in the blood stream and neural lymphatic channels before much damage is done. Three things stand out pre-eminently in giving antitoxin:

- a. The time of giving;
- b. The size of the dose;
- c. The method of administration . . .

"As soon as a patient ill with tetanus is seen 20,000 units of antitetanic serum should be given intravenously and 20,000 units intraspinaly under proper aseptic precautions. These doses should be repeated within eight or ten hours. The second day 20,000 units should be given intravenously and 20,000 units intraspinaly and these repeated within ten or twelve hours . . .

"The third day 20,000 units should be given intravenously, and, as the symptoms abate, the interval between the doses should be lengthened and reduced until recovery takes place. For children one-half the foregoing quantities should be given. The serum should be warmed to body temperature and the median basilic is the vein of choice in giving it intravenously, using a 1½ inch, 18 to 20 gauge needle on a luer syringe. It should be given intraspinaly by the gravity method after the patient has been turned on the side. If opisthotonos is marked or spasm severe it is best to relax the patient with chloroform anaesthesia before making spinal puncture; 10 to 15 cc. of spinal fluid should be allowed to escape before injecting the serum. This serves to prevent an increase of pressure of the spinal fluid and allows a freer circulation of the antitoxin in the spinal canal. It is practically useless for therapeutic purposes to give the serum intramuscularly or subcutaneously on account of its slowness of action; in the former it takes 24 hours to have its maximum effect, in the latter three days, however, it may be given with profit in the region of the wound. Intraneural injections may also be made on the theory that it intercepts and destroys some of the toxins in the

nerve sheaths. It is well to remember that the serum is not germicidal, it is only antitoxic, and all it can do is detoxify the system. Before giving therapeutic doses of serum to those who have asthma and hay-fever and those who have been sensitized to previous injections, it is best to test their susceptibility by injecting ½ to 1 cc. and waiting a few minutes. If no reaction occurs it is considered safe to give. If a pronounced reaction should occur ¼ to ½ cc. of epinephrin should be injected immediately intramuscularly or subcutaneously. . . .

"The inoculating wound should receive early surgical attention. Closed and unhealed wounds should be incised under local anesthesia, all foreign bodies and necrosed tissue removed, the wound then cleansed with iodine, hydrogen peroxide, calcium hypochlorite or Dakin solution and dressed daily. The wound area may be treated by means of the ultra-violet rays on the theory that the bacilli spores are killed by the hyperemia produced. . . .

"Rest and sleep are highly essential and to obtain these liberal doses of the sedatives and antispasmodics are necessary. Chloral hydrate, the bromides, sodium amytal, chlorotone, and pheno-barbital, may be used. In fast recurring convulsions with involvement of the larynx and diaphragm 1 cc of 25½% chemically pure magnesium sulphate solution for each 25 pounds body weight should be given intraspinaly under proper aseptic precautions. This drug has great power in alleviating the convulsions, but it must be used with care, the dose increased, diminished, and repeated when needed, but one dose every 12 to 24 hours is usually sufficient. If respiratory paralysis follows its use as sometimes happens, 5 to 6 cc. of a 5% solution of calcium chloride should be given intravenously. In the writer's hands chloral hydrate and potassium bromide have been the chief drugs used for this purpose. It is remarkable how much of these a patient with tetanus can take without harm: 20 to 40 grains may be given every two to four hours until effect. It is best to begin with the smaller dose and increase as the demands of the patient require. If the patient cannot take them by mouth they may be given by bowel. Morphine is a useful drug in many conditions, but in tetanus it must be used with extreme caution and in small doses, owing to its deleterious effect on the already embarrassed respiratory center. . . .

"The diet should be liquid and highly nutritious. If the patient cannot open the mouth enough for food, feeding may be done through a nasal tube, or by nutrient enema. A 10% Glucose solution should be given per rectum or intravenously if the patient is unable to swallow. It is indispensable that dehydration be prevented, and, if the patient is unable to take enough water by mouth, this should be supplied by the bowel. Two or three warm baths daily, given carefully and cautiously, soothe the patient and render much comfort. As constipation and retention of urine are common, these conditions should be looked after promptly". . . .

COMING MEETINGS

OKLAHOMA CHAPTER, AAGP TO HOLD ANNUAL MEETING

The Oklahoma Chapter, American Academy of General Practice, will hold its ninth Annual Meeting at the Biltmore hotel, Oklahoma City, February 4 and 5, 1957. Following is a summary of the program:

Sunday, February 3, 1957

- 2:30 to 4:00 p.m. Registration, Mezzanine, Biltmore
- 3:00 p.m. Board of Directors Meeting, Biltmore

Manday, February 4, 1957

- 8:00 a.m. Registration, Mezzanine
- 9:30 to 10:00 a.m. Scientific Assembly, Civic Room
Claude J. Hunt, M.D., Kansas City, Missouri—
"Tumors of the Neck, Congenital, Glandular
Lymphatic"
- 10:00 to 10:30 a.m. Visit Your Exhibitors
- 10:30 to 11:00 a.m. Scientific Assembly, Civic Room
Franklin V. Wade, M.D., Flint, Michigan—
"Pitfalls in the Management of Fractures of
the Upper Extremity"
- 11:00 to 11:15 a.m. Visit Your Exhibitors
- 11:15 to 11:45 a.m.—I. Phillips Frohman, M.D.,
Washington, D. C.—"Professional Writing"
- 11:45 to 12 noon Visit Your Exhibitors
- 12:00 noon Roundtable Luncheon
- 2:00 to 2:30 p.m. John S. DeTar, M.D., Pres.,
A.A.G.P., Milan, Michigan—"Cancer Detection
in the Office of the Generalist"
- 2:30 to 3:00 p.m. Visit Your Exhibitors
- 3:00 to 3:30 p.m. Michael Newton, M.D., Jackson,
Mississippi—"Support During Labor"
- 3:30 to 4:00 p.m. Visit Your Exhibitors
- 4:00 to 4:30 p.m. Claude J. Hunt, M.D., Kansas
City, Missouri—"Early Manifestations and
Radiological Indications of Small Bowel Ob-
structions"
- 4:30 to 5:00 p.m. Visit Your Exhibitors
- 6:30 p.m. Social Hour
- 7:30 p.m. Dinner—Civic Room—Biltmore Hotel,
John S. DeTar, M.D., President, American
Academy of General Practice, will be the
Speaker. Entertainment during dinner will
be presented by Herbert Bagwell and his seven
piece group of Oklahoma City University

Tuesday, February 5, 1957

- 7:00 to 8:00 a.m. Breakfast—Civic Room—Bilt-
more
- 8:00 to 10:00 a.m. Annual Business Meeting
- 10:00 to 10:30 a.m. Visit Your Exhibitors
- 10:30 to 12:00 noon Stewart Wolf, M.D., Oklahoma

City—"Neurological Clinic" — Disorders of
Muscle" (Live Clinic)

- 12:00 noon Roundtable Luncheon
- 1:30 to 2:00 p.m.—Visit Your Exhibitors
- 2:00 to 2:30 p.m. Michael Newton, M.D., Jackson,
Mississippi—"The Diagnosis and Management
of the Adnexal Mass"
- 2:30 to 2:45 p.m. Visit Your Exhibitors
- 2:45 to 3:15 p.m. I. Phillips Frohman, M.D., Wash-
ington, D.C.—"Education and The Physician"
- 3:15 to 3:30 p.m. Franklin D. Wade, M.D., Flint,
Michigan—"Pitfalls in the Management of
Fractures of the Lower Extremities"

UNIVERSITY OF OKLAHOMA SCHOOL OF MEDICINE

POSTGRADUATE COURSES—1956-1957 SHORT COURSE SERIES

- 3:30 to 8:30 p.m., Room 118, Medical School After-
and Evening Sessions
- December 19—Intestinal Obstruction
- January 9—Neurological Diagnosis
- February 13—Heart Disease in Children
- March 13—Anesthesiology for Part-Time Anesthet-
ists
- April 10—Problems in Infectious Disease
- May 15—Chronic Pulmonary Disease
- June 12—Surgical Emergencies

SELECTED PROBLEMS IN INTERNAL MEDICINE

- November 26-30—Arranged by the American College
of Physicians

OBSTETRICAL-GYNECOLOGICAL SYMPOSIUM

January 26—Sponsored by Oklahoma City Obstetrical-
Gynecological Society

Guest Lecturers:

Alam Gutmacher, M.D., New York City
Clarence D. Davis, M.D., Columbia, Mo.

Third Annual Pathological Radiological, Etc —8 met
February 22-23—Lesions of the Colon, Sponsored by
Oklahoma Association of Pathologists, Oklahoma
Association of Radiologists, Oklahoma Chapter,
American College of Surgeons

Guest Lecturers:

J. Arnold Bargaen, M.D., Rochester, Minn.
Warren H. Cole, M.D., Chicago, Illinois
Robert S. Grinnell, M.D., New York City
Elson B. Helwig, M.D., Washington, D.C.
Philip J. Hodes, M.D., Philadelphia, Pennsylvania

ADVANCED ELECTROCARDIOGRAPHY

March 4-8—(Prerequisite, Doctor Bayley's Basic Elec-
trocardiography Course)

OPHTHALMOLOGY-OTOLARYNGOLOGY SYMPOSIUM

March 7-8—Sponsored by Oklahoma City Society of
Ophthalmology and Otolaryngology

Guest Lecturers:

Harold G. Scheie, M.D., Philadelphia, Pennsylvania

Henry L. Williams, M.D., Rochester, Minnesota

UROLOGY SYMPOSIUM

March 15—C. B. Taylor Memorial Lecture to be held with this meeting.

TRAUMA SYMPOSIUM

April 5-6—Sponsored by Regional Committee on Trauma of American College of Surgeons

Guest Lecturer:

Daniel C. Riordan, M.D., New Orleans, La.

OKLAHOMA ASSOCIATION OF HOUSE STAFF PHYSICIANS

May 31—Two Guest Lecturers and presentation of original papers by members of the various House Staffs will highlight this program.

POSTGRADUATE CONFERENCE

The Temple Division of the University of Texas Postgraduate School of Medicine offers the fifth Scott, Sherwood and Brindley Foundation Postgraduate Conference in Medicine and Surgery on March 4, 5, 6, 1957. For detailed information write: Director Scott, Sherwood and Brindley Foundation, Scott and White Clinic, Temple, Texas.

Physicians desiring to register for any of the courses listed above should register by writing the Office of Postgraduate Instruction, University of Oklahoma School of Medicine, 801 N.E. 13 Street, Oklahoma City.

NINTH ANNUAL INSTITUTE IN PSYCHIATRY AND NEUROLOGY

The Ninth Annual Institute in Psychiatry and Neurology will be held at the Veterans Administration Hospital, North Little Rock, Arkansas, on February 28 and March 1, 1957. Participants will include:

Francis J. Braceland, M.D., Institute of Living, Hartford, Connecticut, President, American Psychiatric Association.

Doctor Esther Lucille Brown, Director of University and Community Relationships, Boston University School of Nursing, Boston, Massachusetts.

Donald A. Covalt, M.D., New York University Bellevue Medical Center, New York, New York.

Iago Galdston, M.D., New York Academy of Medicine, New York, New York.

Doctor William E. Gordon, Professor of Research, George Warren Brown School of Social Work, Washington University, St. Louis, Missouri.

Doctor Lowell E. Kelley, Professor of Psychology, University of Michigan, Ann Arbor, Michigan.

Louis A. Krause, M.D., University of Maryland, School of Medicine, Baltimore, Maryland.

L. H. McDaniel, M.D., Tyronza, Arkansas.

William S. Middleton, M.D., Chief Medical Director, Department of Medicine and Surgery, Veterans Administration, Washington, D.C.

Overhead Expense Premiums Not Tax Deduction

Several physicians have recently inquired as to whether insurance premiums for policies covering office expense in the event of disability are deductible as a business expense. According to Lytle, Johnston and Soule, attorneys for the Oklahoma State Medical Association, they are not.

In answer to this question, the law firm explained that such premiums are treated in the same manner as health and accident insurance and may be taken into account as medical expense. In most cases, neither of these premiums would be deductible since under both State and Federal returns a percentage of adjusted gross income or a fixed amount of such expenses must first be deducted before any is allowable.

Such rulings, however, have no bearing on liability insurance premiums which may be deducted as a business expense.

Doctor Earl G. Planty, Professor of Management, University of Illinois, Urbana, Illinois.

Mr. Winthrop Rockefeller, Little Rock, Arkansas.

Lewis R. Wolberg, M.D., New York, New York.

Harold G. Wolff, M.D., The New York Hospital, New York, New York.

MODERATORS WILL INCLUDE

J. B. Bounds, M.D., Manager, Veterans Administration Hospital, Roanoke, Virginia.

Delmar Goode, M.D., Manager, Veterans Administration Hospital, Little Rock, Arkansas.

Granville L. Jones, M.D., Superintendent, Arkansas State Hospital, Little Rock, Arkansas.

William K. Jordan, M.D., University of Arkansas School of Medicine, Little Rock, Arkansas.

S. J. Muirhead, M.D., Manager, Veterans Hospital, Salisbury, North Carolina.

William G. Reese, M.D., University of Arkansas School of Medicine, Little Rock, Arkansas.

Terry C. Rodgers, M.D., Little Rock, Arkansas.

Lee G. Sewell, M.D., Manager Veterans Administration Hospital, Pittsburgh, Pennsylvania.

Doctor Braceland will present the principal address of the dinner session Thursday evening, February 28. On Wednesday, February 27, there will be work shops in clinical psychology, psychiatric social work, and psychiatric nursing.

Harold W. Sterling, M.D., Manager of the Hospital, cordially invites interested professional personnel to attend this institute, registration being without charge.

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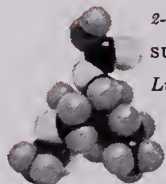
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Annual Meeting Committees Promise Big Attendance

Two floors of commercial exhibits by leading manufacturers and firms catering to physicians will be featured at the 51st Annual Meeting of the Oklahoma State Medical Association in Tulsa, May 6-8, 1957, it was announced last month.

Doctor Donald L. Brawner, Tulsa, Chairman of the Commercial Exhibits Committee, said 28 exhibits would be located on the 16th floor of The Mayo immediately adjacent to the Crystal Ballroom, location of the main lecture room where presentations by eleven nationally known visiting guest speakers will be heard.

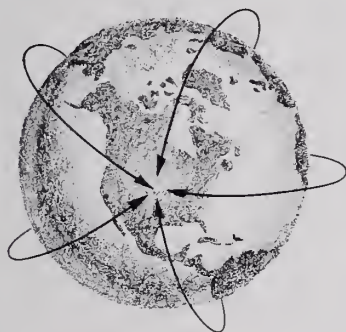
Another 11 exhibits will be housed in a partitioned area in the Main Lobby, immediately adjacent to General Registration. This will also include a comfortable lounge where convention visitors may relax between events and visits to exhibits.

A limited number of scientific exhibits by Oklahoma doctors and organizations will be housed in the Ivory Room on The Mezzanine of the Mayo. Doctors wishing to exhibit should write at once for an official ap-

plication bland to Mr. Jack Spears, Convention Manager, Oklahoma State Medical Association, B9 Medical Arts Building, Tulsa, Oklahoma.

A sizeable number of requests for hotel accommodations at the Annual Meeting have already been received, the Tulsa County Medical Society reported last month. Members should write at the earliest date for hotel accommodations to the Hotels Committee, Tulsa County Medical Society, B9 Medical Arts Building, Tulsa. Please specify date of arrival and departure, type of accommodation desired, and choice of hotel. Reservations will be filled in the order of receipt and will be confirmed about March 1, 1957.

Doctor Walter E. Brown of Tulsa, General Chairman, predicted last month that attendance at the 1957 Meeting might reach 1,000 Oklahoma doctors. "Our splendid scientific and social program has aroused much comment," he said, "and there are indications of a record meeting." A complete list of guest speakers appears in the December issue of *The Journal*.



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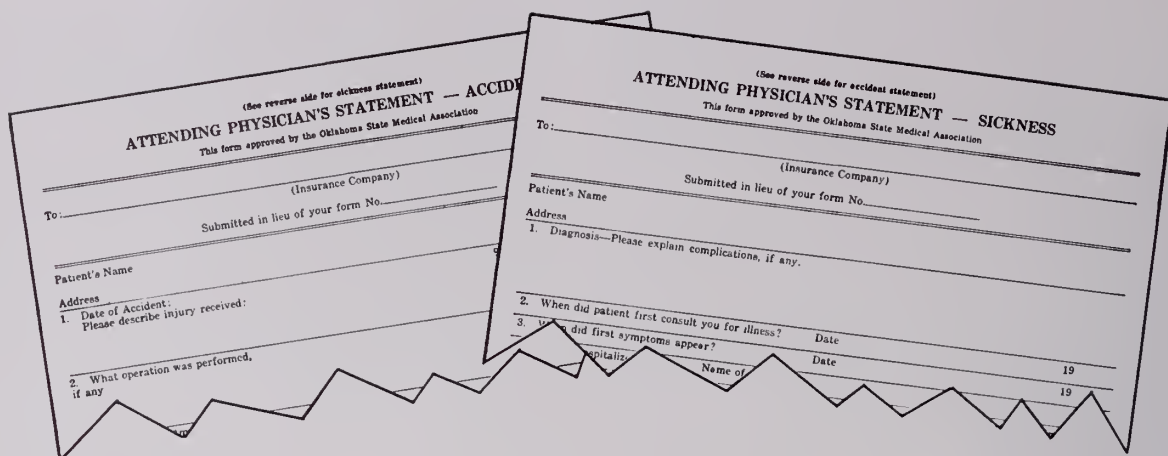
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"The advantages of a standard form are obvious. Too much time is being spent by physicians in deciphering and interpreting the great variety of forms presently in use by the multitude of insurance companies in the health field."

The foregoing statements were made by Basil Hayes, M.D., chairman of the Insurance Committee of the Oklahoma State Medical Association, in introducing the Standard Insurance Reporting Forms.

Doctor Hayes further stated, "The complete cooperation of the medical profession

will be necessary if this simplification program is to be effective."

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Book Reviews

HANDBOOK OF PHYSICAL THERAPY,

Robert Shestack, Ph. G. R. P., P. T. R.
Springer Publishing Company, Inc., New
York City.

The book consists of 199 pages which is divided into four parts. The first part deals with general considerations including a short review of the ancient history of physical therapy and more important the listing of information that should be contained in an order for physical therapy.

The second part deals with the usual physical therapy modalities. These are superficially treated and not adequate for anyone without considerable experience in physical therapy, and is not needed by anyone experienced in physical therapy. There are short chapters on ultrasonics, electro diagnosis and faradic current which go into a little more detail concerning specific technical application.

The third part consists of short discussions and outlining physical therapy for various medical conditions. For one not too well acquainted with the field the outline and suggestion of exercises to be given in various conditions is worthwhile.

The fourth part consists of enumerating movements produced by muscles and is of no great value, as the muscles are only listed in groups.

All in all, there is little of specific contribution to the field of Physical Therapy in this handbook, and certainly is not to be recommended to be of any great value to those acquainted with the field.

AMERICA'S HEALTH: A Report to the Nation by The National Health Assembly.
Cloth. Pp. 395. Harper and Brothers.
New York.

This is the official report of the National Health assembly which was convened at the request of former Federal Security Administrator Oscar Ewing in 1948. The controversial "Ewing Report" to President Truman in September, 1948, was based in great degree on the findings published in this book.

It will be recalled that Mr. Ewing chose a group of 38 men and women, who were recognized leaders in the various fields of

AAGP 9th Meeting Will Attract 5,000; Phelps To Become President

More than 5,000 of the nation's family physicians are expected to attend the Ninth Annual American Academy of General Practice Scientific Assembly, March 25-28, 1957 in Kiel Auditorium, St. Louis, Missouri. An Oklahoma physician, Malcom E. Phelps, M.D., El Reno, will be installed as the new President of the Academy.

During the four-day scientific meeting, the doctors will hear out-standing speakers discuss important subjects including infertility, polio vaccination, and the "neglected" pediatric areas, the eyes, ears, and feet. They will visit 60 scientific and 260 technical exhibits.

The Academy's policy-making Congress of Delegates will convene at 2 p.m., Saturday, March 23. All sessions of Congress and many social functions will be held in the Sheraton-Jefferson Hotel.

Wednesday evening, March 27, following induction ceremonies for Doctor Phelps, more than 3,000 guests will attend a President's reception and dance honoring J. S. DeTar, M.D., Milan, Michigan, President of the Academy.

health, to serve as an Executive Committee. This committee then drafted areas of discussion for 14 major health problems. The discussion groups were organized under the chairmanship of individuals who were widely known in their fields and who, supposedly, would be impartial.

This reviewer does not wish to revive the controversy that raged seven years ago over the organizational development of the National Health Assembly. He does wish to point out that a great deal of valuable thought did emerge from that convocation. Every worker in the field of health should read and study this report with calm deliberation.

Physicians, especially, in the words of Mr. Ewing should "find in it a challenge to insure that the creative forces which emerged in the Assembly will continue, through cooperative, joint endeavors of laymen and professionals, in stimulating plans and activities to meet national, state and community health needs."—John G. Matt, M.D

PHYSICIAN PLACEMENT

Anesthesia

Daniel B. Perry, Residence Quarters, Harlem Hospital, New York, N. Y., age 48, Meharry Medical College, 1948, interned at Harlem Hospital, New York and served residency in anesthesia there, veteran, available December, 1957.

General Practice

Louis Marshall Cuvillier, Jr., 1407 Woodside Parkway, Silver Spring, Maryland, age 44, George Washington University School of Medicine, 1938, interned at Garfield Memorial Hospital, Washington, D.C., one year residency in medicine and obstetrics at Norfolk General Hospital, Norfolk, Virginia. Veteran, available upon 90 day notice. Married.

Orby L. Butcher, Jr., 3106 Alaska, Dallas, Texas, age 29, University of Oklahoma, 1955, now in surgical residency at VA Hospital in Dallas, Veteran. Available, July, 1957. Married.

David L. Mossman, USAH, Orthopedic Department, Ft. Riley, Kansas, age 28, University of Vermont, 1954, available upon separation from service, December, 1957. Married.

Internal Medicine

James E. Morris, Jr., 1034 Second St., S.E., Moultrie, Georgia, age 26, University of Tennessee College of Medicine, 1953, one year internal medicine residency, now serving military obligation, available February, 1957. Married.

Robert W. Datesman, 94 Oak Street, Westwood, Massachusetts, age 30, University of Pennsylvania, 1951, residency training at University of Minnesota Hospitals, and Boston Veteran Hospital, Veteran, available in July, 1957. Married.

Obstetrics-Gynecology

John P. Harrod, Jr., 932 E. 56th Street, Chicago 37, Illinois, age 33, University of Georgia, 1946, served residency at University Hospital, Augusta, Ga., Duval County Hospital, Jacksonville, Florida and at Chicago Lyons-In Hospital, Board certified, veteran, availability date unknown. Married.

Pathology

Jess D. Green, Jr., 1765 South Victor, Tulsa, age 32, George Washington University, 1950, will finish four years pathology residency in January, 1957. Married.

Pediatrics

David Goldstein, 66 Lafayette Ave., Staten Island 1, N. Y., age 38, Long Island College of Medicine, 1949, two years residency in pediatrics, Board certified, available after October 1, 1956. Single.

Surgery

Duane A. Barnett, 1636 N.E. 46th Street, Oklahoma City, age 30, University of Oklahoma, 1952, interned at Wesley Hospital, Oklahoma City, now in residency at Veteran's Administration Hospital, veteran, will be board eligible and available for practice July 1, 1957. Married.

Vernon L. Guynn, 2026 S. Second Ave., Maywood, Ill., age 32, University of Illinois, 1947, passed Part I of

General Surgery Board, military obligation served, available January 1, 1957. Married.

Boyd M. Saviers, 514 Lacewood Dr., Dallas, Texas, age 33, University of Oklahoma, 1947, finishing third year residency at Methodist Hospital of Dallas, veteran, available September, 1956. Married.

Alvin S. Natanson, 49 Kiernan Drive, Rantoul, Illinois, age 36, Tufts Medical College, 1949, residency training at Boston City Hospital, Diplomate of the American Board of Surgery, available upon separation from service, July, 1957. Married.

Urology

John C. Brazos, 406 South Washington, Watertown, Wisconsin, age 36. University of Illinois, 1949, interned at Anckee County Hospital, St. Paul, Minnesota, residency at Milwaukee County Hospital, Milwaukee, Wisconsin. Veteran, available upon completion of residency, July 31, 1957. Married.

Harry Emanuel Fisher, Jr., Box 161, Barnes Hospital, St. Louis 5, Missouri, age 33, University of Oklahoma, 1952, veteran, available July 1, 1956. Married.

Paul Lucian Livingston, 18340 Lake Chabot Road, Castro Valley, California, age 35, New York Medical College, 1946, served residencies at Orange Memorial Hospital, New Jersey and at Veterans' Administration Hospital, Long Beach, California, now Assistant Chief Urologist at V.A. Hospital, Board Qualified, veteran, available upon sixty days notice. Married.

CLASSIFIED ADS

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Special Editorial

Poliomyelitis Vaccinations

The development of the Salk vaccine presented the people of the country with the opportunity for the greatest venture in magnitude in Public Health that has ever been undertaken. Nor has there ever been anything like it for audience participation in a health problem. The new has worn off, the vaccine is plentiful—now what has been accomplished and where do we stand.

Safe and Effective

On April 12, 1955, the results of the field trails on the "pioneers" inoculated in 1954 were announced. On the same day six manufacturers were granted licenses. On April 26, six cases of poliomyelitis were reported among children who had been vaccinated. On April 28 the Public Health Service established a Poliomyelitis Surveillance Unit within its Communicable Disease Center in Atlanta, Georgia. Within a short time the epidemiologic data here developed clearly defined this outbreak as a common source epidemic. All vaccine was withdrawn and a revaluation of its method of preparation was undertaken.¹ The minimum standards for preparation and safe-guarding were redefined by the Public Health Service and the National Institute of Health—and vaccination programs were again started later in the summer of 1955. No subsequent trouble has been reported and at this point one should pause for a moment in appreciation of an alert Public Health Service and its corps of advisors whoever and wherever they are.

Polio in 1955

The epidemic in Massachusetts began the first week in July and offered an unprecedented opportunity to evaluate the effectiveness of the vaccine in an epidemic situation.² The epidemic was due almost exclusively to Type I Virus. "A total of 130 cases occurred among the 137,968 children who received one dose of the vaccine, an attack rate of 94.5 per 100,000. Fifteen cases occurred among 22,673 who received two or more doses, a

rate of 66.4. The rate among the 278,532 unvaccinated children (553 cases) was 198.2 per 100,000. The effectiveness of the vaccine for all cases of poliomyelitis was 53 per cent. For paralytic cases only the effectiveness was 60 per cent. These figures parallel those of Francis and his associates for protection against Type I poliomyelitis."

This report and others indicate the desirability of pursuing immunization programs vigorously.

Who Needs Vaccination?

Studies³ of attack rates on the basis of age in various epidemics in different parts of the world indicate that where living conditions are primitive as they are in the Middle East and North Africa solid immunity comes early and that 90 per cent of the paralytic cases are found in children under five years of age. Where as in the Arctic regions the disease is uncommon, immunity is low and when epidemics do occur people of all ages are attacked. In our own country where studies have been done there has been great variation in the degree of natural immunity acquired by adults, but that for the most part (Charleston, W. Va., study) the higher the socioeconomic status of the group the later in life is immunity developed. It would seem that since the highest degree of susceptibility is in people under 40 all below this age should be vaccinated and that this is particularly true of the patients of the physicians in private practice because they are the ones most likely to come from a higher socioeconomic group.

Will a vaccinated population interfere with the opportunity for the development of a natural immunity?

Apparently it will not. It has been shown that the alimentary tract can be infected by an attenuated virus after immunization (two doses) of Salk vaccine.^{3,4} This has important implications. It means that there will still develop natural immunity in many individuals who are exposed to noninfective amounts of virus particles. It means also that vaccinated individuals may still be infected with attenuated virus vaccine.

The Attenuated Virus

A great deal of progress has been made in this direction.⁴ The hope that a live virus vaccine may cause the virtual disappearance of poliovirus as has happened with the virus of Small Pox may become a reality. The poliovirus is a neurotropic one and will not propagate on ectodermal tissue as does vaccinia virus. It does, however, grow some place in the intestinal tract and this route is the chosen one for successful immunization. This route was the original one used for immunization against tuberculosis with an attenuated tubercle bacillus (BCG). The developmental work has progressed far enough that increasingly larger groups can be immunized but it is not yet ready for wide spread use.

Unanswered Questions

If three doses of Salk vaccine given at the specified intervals is effective, how long will the immunity last?

When should booster doses of the vaccine be given?

What are the probabilities of a reaction of some magnitude to subsequent injections of vaccine?

Will exposure to poliovirus in amounts calculated to produce the disease in the unprotected simply act as a booster?

Will exposure to lesser amounts serve as a booster?

Will boosting be always necessary?

Will the Salk vaccine serve as a protection against infection by a paralytogenic mutant in an attenuated vaccine?

The Program Today

A meeting has been called at the A.M.A. headquarters for January 26, presumably to explore the means of extending the vaccination program to all susceptible individuals. Whatever the hopes may be for the future, the fact remains that the only available means of immunization now is the Salk vaccine. The incidence of poliomyelitis in Oklahoma in 1957 will reflect the diligence with which we cooperate with the spirit and with the implementation of a wide spread program. The figures will show how well we are accepting our community responsibility. It is a real and a terrifying challenge which we must accept.

REFERENCES

1. Poliomyelitis Vaccine: Shannon, James H. and Larson, Carl L. Bull. N. Y. Acad. Med. 32:734 (Oct.) 1956.
2. Evaluation of Poliomyelitis Vaccination in Mass.: Pope, Alston S., et al. New Eng. J. Med. 254:110 (Jan. 19) 1956.
3. Indications for Vaccination against Poliomyelitis. Paul, John R. J.A.M. 162:1585 (Dec. 29) 1956.
4. Present Status of Attenuated Live Virus Poliomyelitis Vaccine. Bull. N. Y. Acad. Med. 33:17 (Jan.) 1957.

—WASHINGTON'S BIRTHDAY CLINIC—

Headache Authority To Be Guest Speaker

Doctor Harold J. Wolff of Cornell University, world authority on the problem of headaches, will be the guest speaker for the 24th annual Washington's Birthday Clinic.

The meeting will convene promptly at 10:00 a.m. on Friday, February 22, 1957, at the Biltmore Hotel in Oklahoma City.

As in years past, the Oklahoma City Internist Society is sponsoring this meeting and inviting each physician in Oklahoma to attend as their guest.

Put this important date on your calendar now!

W. W. RUCKS M.D., Presiding

- 10:00 a.m. The Porphyrias — William R. Paschal, M.D.
- 10:30 a.m. Magnesium Metabolism—W. O. Smith, M.D.
- 11:00 a.m. Basis of Chemotherapy in Malignant Disease—L. P. Eliel, M.D.
- 11:30 a.m. Highest Integrative Function in Man after loss of known cerebral hemisphere tissue—Harold G. Wolff, M.D.

GEORGE BARRY, M.D., Presiding

- 1:30 p.m. Newer Insulins and Hypoglycemic Agents —Bert F. Keltz, M.D.
- 2:30 p.m. Chemotherapy of Tuberculosis — Charles M. Harvey, M.D.
- 3:00 p.m. Individualized Management of Peripheral Vascular Occlusive Disease—Edward R. Munnell, M.D.
- 3:30 p.m. Clinical Pathological Conference—William T. Snoddy, M.D. and Robert H. Bayley, M.D.

Winter Vomiting Disease

Central Oklahoma and perhaps other areas in the state have been sites of a particularly severe form of "vomiting disease" during the past few weeks. One of the most distressing accompaniments in many patients has been a disturbed central nervous system not explainable on the basis of an altered electrolyte pattern or a rapidly developing dehydration. Many of the patients have shown an uncontrollable restlessness, irritability and an apparent lack of an acute awareness of this surrounding. They have, however, not shown the classical signs of either meningeal irritation or of increased intracranial pressure. Many have also had a severe and difficult to control diarrhea.

Any light that can be thrown on this poorly understood condition is indeed welcome. Haworth et al¹ have reported their findings in an institutional epidemic of 18 cases in the Sheffield Children's Hospital. Ten of these were in doctors and nurses and eight in children. In three of the children the spinal fluid was examined and increased white cell counts were found in all three: 1024, 150 and 866 respectively. All three recovered promptly and no growth was obtained from any of the spinal fluids. "Single serum-specimens from four cases and paired-serum specimens from 12 cases were examined by complement-fixation tests using antigens for the viruses of: influenza A, B and C; lymphogranuloma venereum and Q fever; lymphocytic chorio-meningitis; adenovirus (A.P.C.); poliomyelitis types 1, 2 and 3; and coxsackie types A1, A2, A3, A9, B1, B2, B3, B4 and B5. Though virus-antibody was detected in some specimens, there was no diagnostic rise in antibody for any virus. No *Streptococcus MG* agglutinins were found. One specimen of faeces and two throat swabs yielded no virus in monkey-kidney tissue-cultures."

The authors discuss other similar epidemics that have been reported. No etiologic agent in any has been found. In some diarrhea has been a prominent feature. The Echo viruses (E.C.H.O.—enteric cytopathogenic human orphan) are known to be associated with aseptic meningitis. The only practical method, however, of detecting these is by culture and they would on another occasion inoculate C.S.F., throat swabs and feces into tissue culture.

REFERENCES

1. "Winter Vomiting Disease" with meningeal involvement. Haworth, J. C. et al *Lancet*. 2:1152 (Dec. 1) 1956.

Drug Resistant Staphylococci

Knight and White¹ in a careful study of staphylococci in hospitalized patients found a high percentage of carriers and that when susceptible strains were destroyed by antibiotics resistant strains appeared in the nose and throat.

This "implies an impressively potent tendency of the host to remain a carrier, which is probably independent of the effect of antimicrobial drugs." The change from a sensitive to a non-sensitive strain was most apparent when tetracycline was used because of the very "high percentage of strains *susceptible* to this agent in newly hospitalized patients and the high percentage *resistant* among hospital staphylococci." They theorize that persistently positive staphylococci carriers treated with antimicrobial drugs for one reason or another are the principal source of drug-resistant staphylococci. They think that drug resistance originally develops by the process of selection of resistant mutants in the course of drug treatment of patients, and that strains which become a part of the reservoir of drug resistant staphylococci in the hospital are perpetuated there by the action of agents like

the tetracyclines, which eliminate susceptible strains from new patients leaving them vulnerable for invasion with drug resistant hospital staphylococci. They consider that the control of the development and dissemination of drug resistant staphylococci may be more effectively approached by making changes in the kind of antimicrobial therapy given to patients than by direct measures to prevent person to person spread of staphylococci.

1. Knight, Vernon and White, Arthur, B. C.: Drug Resistant Staphylococci, South. M. J. 49:1173 (Oct.) 1956.

Oklahoma Dentistry Needs Manpower

The dental profession is confronted with a major emergency. The people of Oklahoma can no longer depend on other areas to supply them with dentists, or give their citizens dental education. Dental schools in other states cannot be expected to educate enough dentists to supply also in Oklahoma, since there is a shortage of dentists in almost every state.

Very detailed and comprehensive studies under the direction of the Oklahoma State Dental Association and the State Department of Health conducted during the past four years give unquestionable statistical support to the conclusion that Oklahoma should have a school of Dentistry without delay.

It is necessary to have a least one dentist per 2,000 population to supply moderately adequate dental health care. At the present time Oklahoma needs 200 more dentists to supply this number.

To maintain the above ratio, we will need 650 additional dentists by 1975, or about 65 per year. This figure is based on careful statistical studies and very conservative estimates of increased population. The problem is to find a way to obtain 200 plus 650 additional dentists by 1975, or 96 per year.

There are no factual figures to counter the above estimates if we are willing to accept the premise that our people are entitled

to dental health service equal to the average of the nation. Indeed, it is highly improbable that we will receive even 36 new dentists per year from other schools, as the presently rapid growth of the national population is increasing the demand everywhere. This observation is supported by the following: In 1935, 36 dentists were licensed to practice in Oklahoma. Of these,

10 are practicing in Oklahoma

7 are practicing elsewhere

16 are in military service

3 are taking post-graduate training.

In 1956, 37 dentists were licensed to practice in Oklahoma. Of these,

9 are practicing in Oklahoma

3 are practicing elsewhere

21 are in military service

3 are taking post-graduate training.

All the dentists whom we licensed during 1955 and 1956 and went into military service, went directly from school. Since these individuals have not established their practice, experience indicates not more than one-half will return to Oklahoma. This will give us only twenty dentists per year. To counter this, 27 practicing dentists died or retired, due to age, during 1955, and 12 died in 1956. We do not have the number retired during 1956 at this time.

In summary: Oklahoma needs 96 new dentists per year until 1975, and at least 65 per year thereafter to maintain a minimum number for acceptable dental care of our people. Under present and foreseeable future conditions, we cannot expect to get more than 20 dentists per year. To provide for conservative population growth estimates and normal yearly losses, we should graduate at least 65 dentists per year from our own school.

From this brief analysis, it is evident that Oklahoma dentistry is in dire need of a dental school. Dentistry has no dental educators in our school system. This handicaps those who are awake to the necessity for action. The dental profession needs the active support of all health professions in obtaining such a school.

Scientific Articles

Angina Pectoris:

ETIOLOGY, DIAGNOSIS and PROGNOSIS

SAM N. MUSALLAM, M.D.

Etiology

The term, Angina Pectoris, was introduced by Heberden in 1768, and was first mentioned in the literature in 1772. It literally means "strangling of the breast or breastbone."¹

The attacks of angina pectoris depend upon relative and temporary myocardial anoxia or ischemia, an idea first expressed by Parry in 1779. The coronary blood flow may be adequate to meet the normal myocardial needs of an individual at rest, but insufficient when increased requirements are demanded. Thus the etiologic factors in angina pectoris responsible for insufficient coronary circulation may be suitably enumerated under the following groups:

- I. Narrowed or occluded coronary vessels:
During their course: Arteriosclerosis (most common cause), angiitis, embolism.
At their mouths: Aortitis (syphilitic)
- II. Increase in the work of the heart:
Exercise, emotion, fever, rise in blood pressure, aortic valve disease, thyrotoxicosis, anemia, paroxysmal tachycardias.
- III. Diminished coronary flow:
Aortic stenosis and incompetence, congenital anomalies, shock and hemorrhage, hypotensive crises (Addisonian crisis, following sympathectomy, spinal anesthesia, hypoglycemic shock), paroxysmal tachycardias.
- IV. Insufficient oxygen carried in the blood (anoxemia):
Anemia, high altitude, carbon monoxide poisoning, anesthesia with inadequate oxygen, acute pulmonary disease, asthma.
- V. Deficient or inadequate filling of the coronary vessels:

THE AUTHOR

Sam N. Musallam, M.D., was graduated from the American University of Beirut, Lebanon, in 1937. He left Palestine in 1948 and subsequently took postgraduate work at New York University where he served a three year residency with Bellevue Medical Center.

Doctor Musallam moved to Oklahoma in 1953 and is now an Instructor in Medicine, University of Oklahoma School of Medicine. His specialty is Internal Medicine, Cardiology. He is a member of the American Heart Association, Oklahoma City Clinical Society, and Internists Association.

Tachycardias-shortened diastole. (Tachycardias also cause increased heart work and increased demand for oxygen.)

VI. Coronary spasm:

Vasomotor effects on the coronary circulation may be induced by emotion and exposure to cold. This has been proved, nearly beyond doubt, by clinical observations and studies by Friedberg, Wilson, Gilbert and others.

Diagnosis

Not every chest pain is angina pectoris; and angina pectoris does not necessarily usher in by anterior chest pain. Thus, chest pain may be cardiac or non-cardiac in origin, and it becomes exceedingly important to differentiate between the two types. The criteria usually employed to differentiate between angina and non-cardiac chest pain are:

	Angina Pectoris	Non-Cardiac
1. Onset	On effort or emotion	Spontaneous
2. Location	Substernal	Apical
3. Duration	Less than 5 min.	Prolonged
4. Type	Constricting	Sticking or aching
5. Relief by nitroglycerine	Prompt	None
6. Radiation	Commonly to left arm	Uncommon

The diagnosis of angina pectoris may be established by the presence of a history of a typically substernal pain that occurs characteristically during effort, emotional stress, exposure to cold or after a large meal. One should be particularly suspicious of a history of discomfort or "indigestion" after meals, mainly if accompanied by sweating, weakness or radiation to the chest. This diagnosis is however not always so simple, for how many patients actually present themselves with the above mentioned six criteria? Harrison² found the pain to be substernal in only half the cases of angina pectoris; it was constrictive or "pressing" in only 50 per cent of the cases. He noted that patients with angina on effort often also experience pain spontaneously. In 10 per cent of the patients the pain occurred in the absence of any effort. Master et al.³ found that exceptions ranged between 15 and 40 per cent, and state that none of the six characteristic criteria should be used alone to differentiate between cardiac and non-cardiac chest pain; but when there are present three or more of the characteristics of either cardiac or non-cardiac pain, a definite diagnosis can usually be made. It is to be emphasized here that radiation of the pain to the left arm, which is stressed as an important symptom, is not necessarily characteristic of angina pectoris, since it may occur in hiatus hernia and in esophageal, pleural and spinal disease.

The differential diagnosis is not always easy. A great number of clinical conditions may be often confused with angina pectoris and have to be considered in the differential diagnosis. Many times they offer a real challenge to the cardiologist and clinician. Some of these are enumerated in Table I.

In the presence of coronary artery disease and anginal pain, the entire physical examination, roentgenoscopy and the 12 lead resting electrocardiogram may be completely normal. Master reported 37 per cent and others 25-60 per cent of normal findings.⁴ Although the correct clinical diagnosis of angina can usually be made, as above mentioned, on the basis of the careful detailed history alone, it is important in these cases to have some corroborative, objective evidence to confirm such a diagnosis. This becomes more important in borderline cases where pain is atypi-

cal and the clinical diagnosis is doubtful. About 60 per cent with functional heart disease give a history of chest pain or pressure. Barker states⁵ "An objective evidence in the form of a positive electrocardiogram is welcome in any patient at any age, displaying typical or atypical symptoms, but whose resting electrocardiogram is not abnormal and in whose case one or more of the following is in question: Insurance liability, insurance benefits, military service, litigation of various sorts and individuals in responsible and key positions. In these cases it is impossible for the physician to make a tracing at the time there is a spontaneous attack. Thus an attack should be induced by exercise." A patient either has or has not angina pectoris, and it is most unfair to "tag" an individual with the diagnosis of angina pectoris or coronary artery disease who does not have it. It is equally important to diagnose the syndrome in a patient and treat him accordingly, giving him a chance to live within his coronary tolerance for enough time to develop coronary collateral circulation and effect a possible functional cure.

But, is it possible to obtain such an objective evidence to possibly confirm or rule out angina pectoris? A number of tests intended to fill that gap have been developed and tried, such as the adrenalin, anoxemia and the two-step Master tests. Each of these tests has its adherents and opponents, and as expected there has been much controversy. However, like the electrocardiogram, any of these tests is only a laboratory aid and no laboratory aid is infallible, and thus no one should ever over interpret any laboratory result. Out of these tests, I have been personally impressed by the two-step standardized Master test and have been using it routinely, when indicated. This test, when properly conducted is both simple and safe, and in more than 15,000 cases Master had no accident with a patient. Even though my personal experience is much more limited than that of Master I have not yet had any accident with it. Anybody who intends to use the test, however, must familiarize himself with the indications, contraindications, criteria for positivity etc.⁶

The Two-Step Master Test

The test consists in ascending and descend-

ing two nine-inch steps a variable number of times (depending upon age, sex and weight) in one and one-half minutes. The accustomed nature of this work allays apprehension, thereby reducing psychic disturbances to a minimum. The double two-step test is usually done if the single test is negative, and is claimed by some to be positive in 95 per cent of definitely proved cases of coronary artery disease. Master and associates state that "negative single and two-step tests practically, although not absolutely, exclude the presence of coronary insufficiency, exclude the presence of coronary insufficiency, and that it is very rare indeed for a 'heart attack' to occur within a year after a negative Master double two-step test." However, again there is much controversy about this statement and many workers in the field disagree with Master. Riseman⁷ states that it is generally agreed that a negative test does not prove that the patient is free from coronary artery disease and claims that many reports from different clinics show that from 40 to 80 per cent of patients with undoubted angina pectoris may have negative single Master's test, but the negative results with the double two-step Master's test are apparently less frequent.

In spite of this heated controversy, the results of this test are many times very helpful and rewarding, at least in my personal experience. They have settled for me a number of difficult, atypical cases. I mention only a few examples: Fig. 1: Two-step test of a 48 year old male patient who had atypical pain mainly epigastric. Peptic ulcer and gall bladder diseases were suspected by some physicians. The resting electrocardiogram was interpreted within normal limits. The two-step test was typically positive. The diagnosis of coronary insufficiency was made. About six months later the patient had epigastric pain radiating this time to the chest for 24 hours before he sought help. He was hospitalized and an electrocardiogram done on admission showed severe depression of ST segment in all leads except aVR (elevated)—a pattern similar to his two-step test. One hour later patient was found dead in his bed and a post mortem examination revealed extensive early myocardial infarction.

Fig. 2: A 39 year old white male physician had been having epigastric pain for months. He had had frequent previous resting electrocardiograms which were repeatedly reported as normal. Because of that finding and a normal heart size, angina was ruled out. When he was seen on July 13, 1955, history revealed that his epigastric pain recurred mainly after exertion, emotional upset or a heavy meal with an occasional radiation to the lower chest. His resting electrocardiogram—3 standard leads, 3 unipolar limb leads, the V leads V₁ to V₆ and VE was normal; blood pressure was normal; roentgenoscopy of the heart and lungs were all normal. A single two-step test Fig. "2A" was positive and showed depression of ST in II, III, AVF. The diagnosis of angina

DIFFERENTIAL DIAGNOSIS Clinical Conditions Often Confused with Angina Pectoris	
SYSTEM	DISEASE
Gastrointestinal	Esophageal Disease
	Hiatus hernia
	Peptic ulcer
	Gallbladder disease
	Pancreatitis
Chest, Pleuro-pulmonary	"Indigestion"
	Pulmonary hypertension
	Asthma, emphysema etc.
	Pleurisy, pleurodynia
	Spontaneous pneumothorax
Cardiovascular	Herpes zoster
	Pulmonary or mediastinal tumors
	Costochondritis or Tietze's syndrome
	Acute myocardial infarction
	Pericarditis,
Skeletal	Valvular heart disease
	Dissecting aneurysm
	Lower cervical or upper dorsal lesions
	Spondylitis, fibromyositis
	Bursitis, "shoulder arm syndrome"
Nervous	Neuritis, neuralgia
	psychoneurosis, neurocirculatory asthenia.
Miscellaneous	Thyrotoxicosis
	Anemia

Table I. List of diseases by system to be considered in the differential diagnosis of Angina Pectoris.

pectoris was made and the patient told to restrict his activities and was put on nitrites. However the patient, who is an M.D., suspected the diagnosis and apparently continued to think that his trouble was gastrointestinal. On July 23, 1955, when he came back with severe epigastric pain, he was supporting his epigastrium with both hands. On entering the office he said, "Now I know what I have. This pain could not be caused by anything but a perforating peptic ulcer." An electrocardiogram done during the pain (Fig. 2B) showed no change from that of July 13, 1955. With early myocardial infarction suspected, a two-step test was not done. His abdomen was soft. A barium meal showed esophagus, stomach and duodenum normal. He was admitted to the hospital where the pain continued very severe and after a few hours it was typically retrosternal. The electrocardiogram after 48 hours showed classical changes of infero-septal infarction and a pericardial friction rub was heard for a few days. He had a stormy course but recovered and was dis-

charged from the hospital. Fig. 2(C) shows his electrocardiogram two months after the start of his infarction when he reported for a check up.

Fig. 3: The two-step of a 39 year old male patient who had epigastric pain with radiation to the back and was being treated for peptic ulcer in spite of negative x-rays. The history revealed pain occurring mainly on exertion or after a heavy meal. Resting electrocardiogram was within normal limits but the two-step test was positive. He is now, six months after this electrocardiogram, practically asymptomatic.

Prognosis

Prior to 1941 the diagnosis of angina pectoris meant a "death warrant." We believed then that the coronaries were end arteries with no collateral or intercommunication between them. However, Schlessinger and Blumgart⁸ exposed, by careful dissection and injection, the evolution of the life saving coronary collateral circulation between 1937-1941. We now know that, in the normal

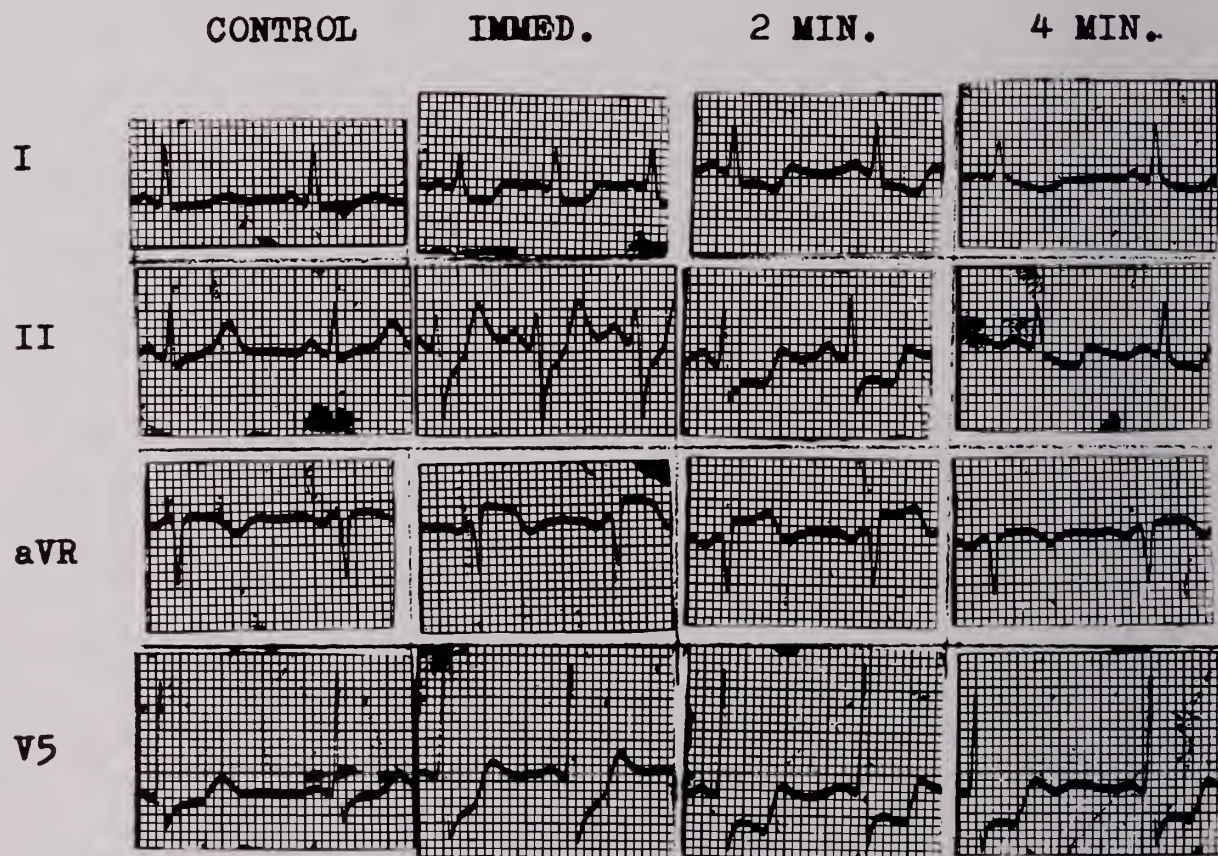


Fig. 1: Positive single two-step test. Note severe depression of ST in I, II and V5 and elevation in aVR.

heart, fine communications are present between the coronary arteries, but these are functionally inadequate to prevent the serious or fatal consequences of sudden occlusion. However, in the presence of marked narrowing, especially if it has developed rather slowly, and occlusion, collateral channels of larger than normal size can be regularly demonstrated. These collateral channels play a major part in safeguarding the heart from the consequences of obstructive lesions and explain to us the apparent cure of many patients with coronary insufficiency.

Our understanding of this clarifies the change of attitude by the medical profession

to the once hopeless, incurable, deadly angina pectoris. The fact that in many cases, there slowly but spontaneously develops an adequate collateral coronary circulation is of prime importance for the understanding of the management of patients with angina pectoris. Thus the logical attitude of a physician, and his prime duty is to try and tide a patient over many weeks or months until such collateral circulation is formed. This can be done by warning the patient against undue strain, physical or emotional, together with the prophylactic use of nitrites. It is very important that a patient know his functional capacity and coronary tolerance so as not to exceed his limits. This does not mean

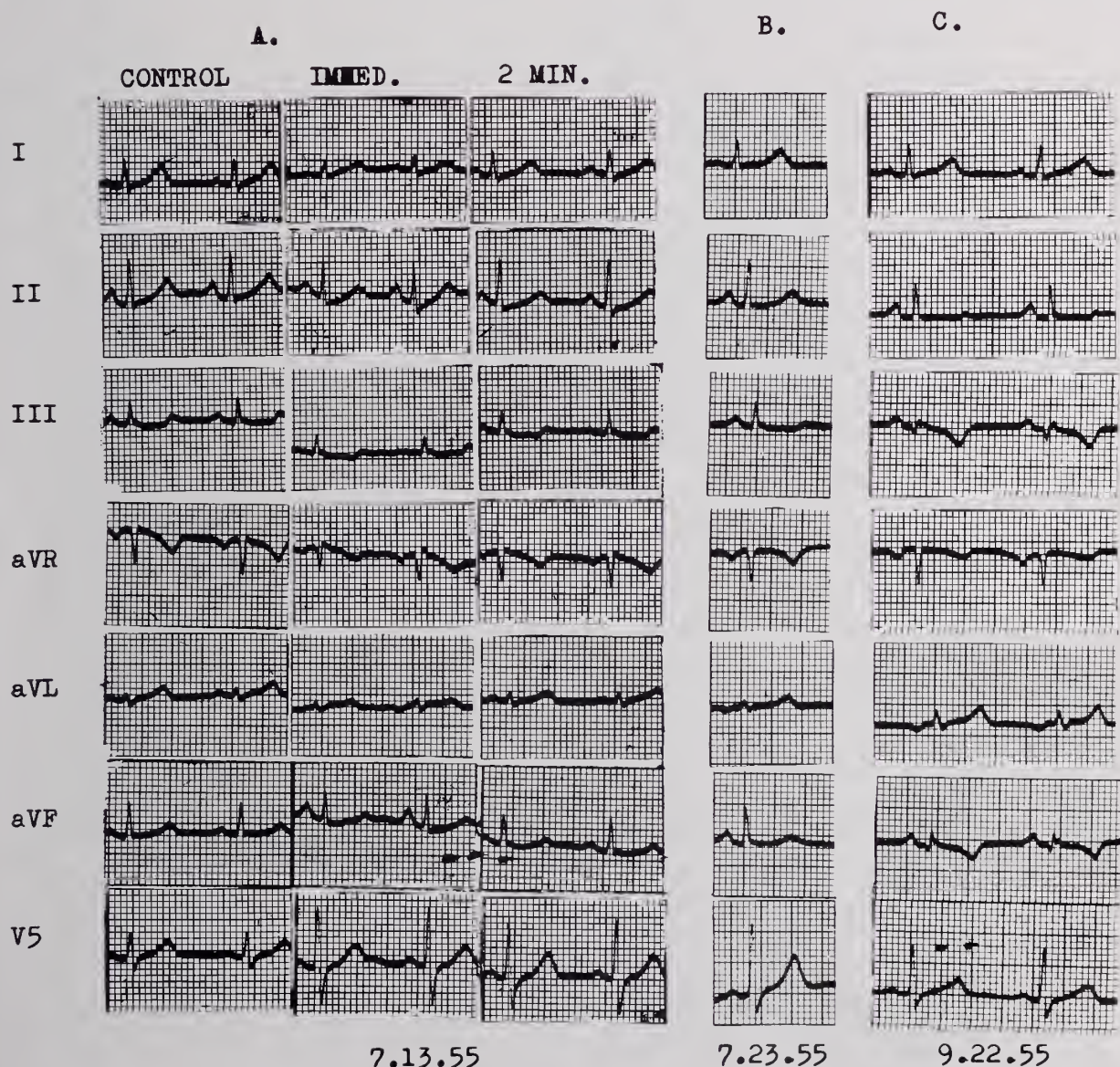


Fig. 2: A. Positive single two-step test. B. Normal resting electrocardiogram during severe pain early in myocardial infarction. C. Older stage (subacute) of inferoseptal (diaphragmatic) myocardial infarction.

that patients be considered crippled. They should be encouraged to lead as normal a life as possible, avoiding excessive mental and physical strain. In this way many patients can be sent back to a happy fruitful life, rather than into the exile of invalidism and dependency.

In general the prognosis of angina pectoris is essentially that of the underlying disease, eg., syphilitic aortitis, aortic stenosis or rheumatic valvular disease are adverse factors. When there is a contributory factor that is amenable to specific treatment such as anemia of thyrotoxicosis, the outlook may be more favorable than in the absence of such a factor. Coronary throm-

bosis is a natural consequence of coronary sclerosis and is thus always a possible complication. Danger of sudden death, which occurs in about 10-15 per cent of cases, is an intrinsic element of the syndrome of angina pectoris and must be kept in mind.⁹

In the largest group of cases of angina pectoris, those due to coronary atherosclerosis, the prognosis is more encouraging than in the groups due to the other major causative diseases. White et al.¹⁰ followed up 497 patients with angina over a period of 23 years and found that 52 patients still survived; the average life being ten years. In a follow-up of 3,440 cases of angina pectoris, Montgomery et al.¹¹ found 405 patients

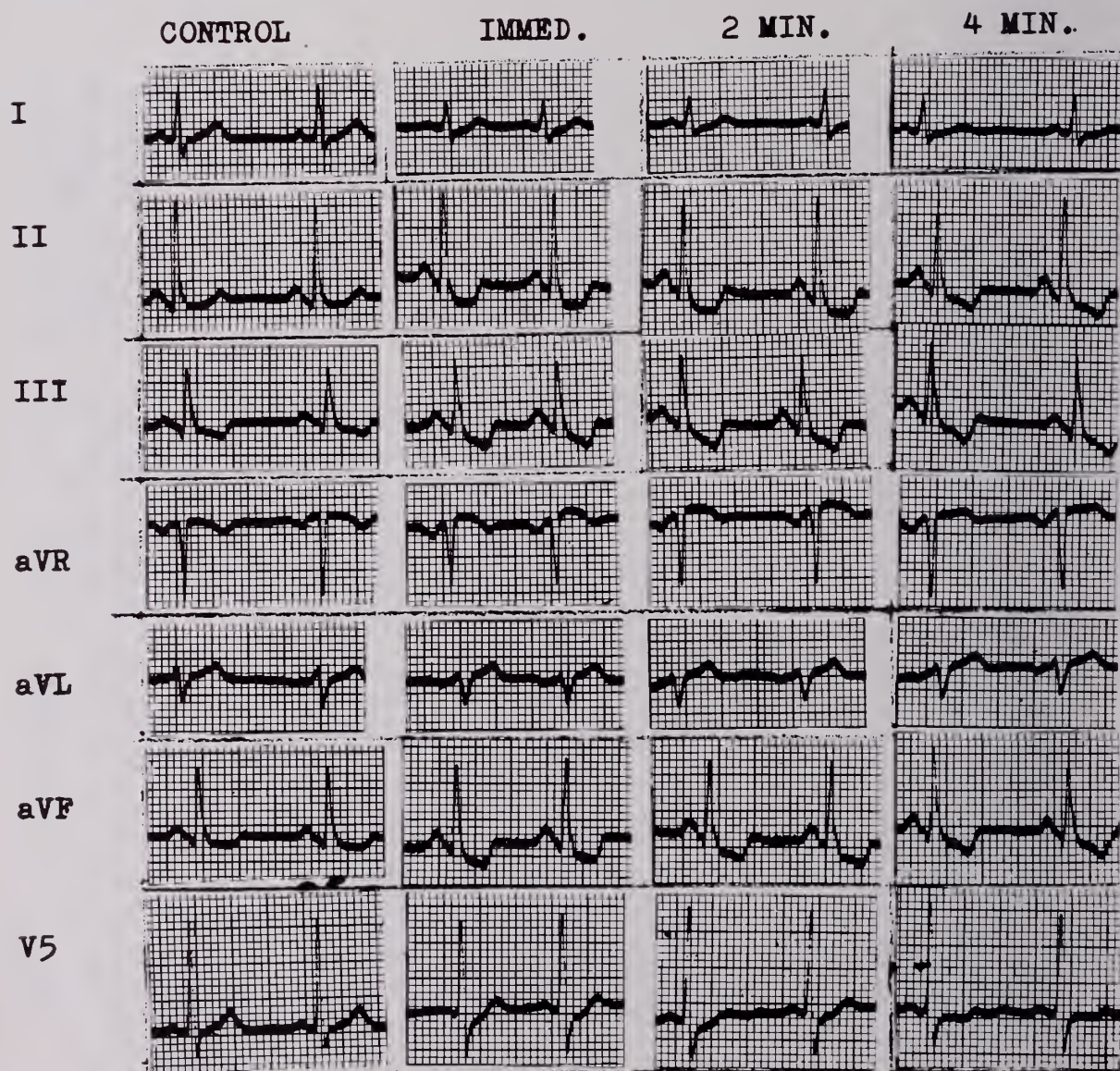


Fig. 3: Positive single two-step test. Note typical depression of ST segment.

surviving 10 years or more. In another follow-up study of 6,822 cases for five to 23 years, Block, Crumpacker et al.¹² found that about 15 per cent succumbed in the first year after onset; thereafter there was an average annual mortality of nine per cent. Of the total groups, 58.4 per cent survived five years and 37.1 per cent 10 years, while the 10 year survival expected for the normal population is 70.4 per cent. It is here to be emphasized that all workers agree that many patients have a normal life span.

Summary and Conclusion

1. The diagnosis and differential diagnosis of angina pectoris depend mainly on obtaining an adequate history. In atypical cases where the physical examination is negative some corroborative objective evidence to confirm the diagnosis is most welcome. This sometimes is possible by using the two-step test.

2. Patients who suffer from angina pectoris constitute many times a challenging major economic and psychological problem. The above discussion and statistical data, however, seem to indicate that the past pessimism of both physician and layman must be discouraged and possibly replaced by one of relative optimism as to a possible fair

chance of longevity and complete functional recovery in a fairly good percentage.

3. Patients should be encouraged to lead as normal a life as possible within their coronary reserve, avoiding excessive physical and mental strain until a sufficient coronary collateral circulation develops. This attitude will undoubtedly help send many more patients back to a happy and fruitful life rather than into the exile of invalidism and dependency.

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OILY DIONOSIL in Bronchography

JAMES R. LOWELL, M.D.

Since the introduction of clinical bronchography in 1922 by Sicard and Forestier, Lipiodol has been the principle contrast medium used. This has been a good contrast medium, but has had the drawback of remaining in the lungs for many months due to its slow absorption. Thus, x-ray changes in the lung fields may be obscured, repeating bronchograms at short intervals may be prevented, and misdiagnosis might result if a subsequent physician is unaware of the previous bronchography. For these reasons, attempts have been made in recent years to find new contrast media which would be rapidly absorbed. In addition, good contrast, adequate bronchial filling, and a low degree of bronchial irritation must be obtained.

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Various water soluble media have been tried. These have usually consisted of Diodrast or related organic substances, made more viscous

by the addition of cellulose derivatives. However, because of their hypertonicity, they have caused excessive bronchial irritation and coughing. There also has been a lack of uniform filling, inadequate filling of peripheral branches or rapid dispersion.^{1,2}

Dionosil, a different type of compound, has recently been introduced into this country from Europe as a contrast medium more nearly meeting the criteria of the ideal. It has been prepared in both aqueous and oily preparations. The aqueous preparation has been found too irritating by several workers and therefore will not be considered at this time.

Oily Dionosil is prophliodone (N-propyl 3:5 di-iodi 4 pyriodone-N-acetate) in a 60 per cent w/v suspension in arachis oil and containing 34 per cent iodine.³ Studies have shown that congestion in the rabbit lung following intratracheal administration of propyl-iodone was similar in degree to that observed with iodized oils, such as Lipiodol, but shorter in duration.⁴ Animal and human studies have shown that both intratracheal and oral administration of propyl-iodone result in hydrolysis and then elimination by the kidney without iodine or iodide ions being present in the urine. Therefore, propyl-iodone could be used in iodine sensitive patients with relative safety.⁴

Methods and Materials

The present report concerns the use of Oily Dionosil for 23 consecutive bronchograms in 21 patients. Nembutal, morphine, and atropine were used as premedications. Five per cent Cyclaine was used for tropical anesthetization of the pharynx and larynx, after which a lubricated 16 F catheter was passed through the nose and into the trachea. Additional Cyclaine was introduced through the catheter until the cough reflex was sufficiently depressed. Then Oily Dionosil was injected slowly through the catheter while a fluoroscopist directed the flow of the material into the different segmental bronchi by altering the position of the patient. Six foot radiographs were then made in multiple views. Upon return to the ward, the patient was given fifteen minutes postural drainage immediately, repeated the following morn-

ing, in order to clear as much of the oil as possible from the bronchi. An additional chest radiograph was obtained within the next week in most cases to determine the amount of unabsorbed media.

Results

The patients who had such bronchograms made were all males between the ages of 22 and 67, with an average of 41 years. The most common final diagnoses were chronic bronchitis, bronchiectasis, pulmonary tuberculosis, and middle lobe syndrome.

Severe coughing occurred upon three occasions when the Dionosil was first administered. Two of these patients later had a successful Dionosil bronchogram with greater amounts of premedication used. Another patient had severe coughing on the evening following the procedure.

The maximum temperature in each patient was noted for the week following the procedure. With an arbitrary oral temperature of 99.6° being considered the upper limit of normal, it can be said that seven patients had febrile reactions. These invariably occurred the day following the bronchogram and returned to normal the next day, except in two patients. One of these patients had intermittent fever prior to the procedure and his temperature returned to normal in seven days. The other patient had a temperature as high as 102° and vague discomfort in the chest. Physical examination and chest films at that time showed no evidence of pneumonitis, and his temperature returned to normal in six days. One of the patients who had a repeat bronchogram had a severe coughing episode the first time and temperature elevations upon both occasions. There appears to be no relationship between the amount of Dionosil used and temperature elevations.

Four of the patients had pulmonary resections from 9 to 15 days following their bronchography, two for pulmonary tuberculosis and one each for bronchiectasis and lipid pneumonitis. There was no gross or histological reaction which could be attributed to the contrast material, although in the case of lipid pneumonitis it might be difficult to differentiate a reaction to the media from the underlying pathology.

P-A chest roentgenograms taken within one week usually revealed barely noticeable amounts of contrast media after one to two days following bronchography. It was noted that when the patient coughed excessively during the procedure, there would be a tendency towards alveolar filling and this appeared to be associated with slight delay in absorption of the media. However, there was never enough unabsorbed contrast media to significantly obscure follow-up radiographs even at short intervals afterwards. There was, nevertheless, satisfactory flow into the various segmental bronchi without undue tendency towards alveolar filling.

Discussion

There have been a few reports in the medical literature in the last few years concerning the use of Dionosil. One of the most complete reports was that by Nice and Azad which included a review of their experience in 74 examinations in 68 patients.³ They found a slight temperature elevation on the day following bronchography in eight cases—only about a third as often as we observed in our smaller series. They noticed slight cough in about 10 per cent of cases which is comparable to our observations. However, estimating or comparing the amount of cough caused by the media is very difficult due to the variation in dosages and responses to the different premedications. Other reactions which have been rarely reported include headache, sore throat, dyspnea, and pneumonia.

Nice and Azad estimated 75 per cent of the Dionosil had disappeared from the pulmonary fields in 24 hours and 90 per cent in 48 hours.³ Wisoff and Felson estimated 90 per cent clearing in 24 hours.¹ Our own observations would indicate that these are somewhat conservative estimations since we usually found barely noticeable evidence of previous Dionosil bronchography on the x-ray films after 24 hours.

Wisoff and Felson also have compared adequacy of bronchial filling in 30 Dionosil and 30 Lipiodol bronchograms.¹ Their results were numerically in favor of Dionosil, but admittedly not statistically significant.

The lack of a tendency to alveolar filling that we noted has also been noted in literature.² This is considered to be one of the better attributes of Dionosil since it makes possible utilizing relatively long periods of time to insure adequate segmental bronchial filling without increasing the possibility of alveolar filling and its resultant obscuring of the bronchogram.

McSwain and Allan considered the radiographic contrast afforded by Dionosil to be approximately equal to that of iodized oils.⁵ It was considered adequate in our series, but we have made no attempt to compare Dionosil to other media.

Conclusions and Summary

The use of Oily Dionosil in bronchography results in almost complete clearing of the chest radiograph in one or two days.

Adequate bronchial filling and contrast with little tendency towards alveolar filling have been noticed with this media.

A slight temperature elevation following the procedure was fairly common in this series, but not troublesome.

There was little bronchial irritation as evidenced by cough and no significant histological changes were noted in four patients who underwent pulmonary resections after Dionosil bronchography.

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O.S.M.A. Annual Meeting

MAYO HOTEL

TULSA, OKLAHOMA

PRESIDENT'S LETTER



George Bernard Shaw once said, "In this world if you do not say anything in an irritating way, you may just as well not say it at all, since nobody will trouble themselves about anything that does not trouble them. The attention to criticism is in direct proportion to its indigestibility." May the following be irritating and stimulating.

We the members of the Association are about to lose \$100,000 ANNUALLY — premiums saved on Professional Liability Insurance — unless we can quickly — and this is possible—reverse the trend of the incidence of claims.

A careful analysis, by our Carrier shows that suits are not the result of poorly qualified Doctors; but, imagine if you please, the prime cause is "Loose Talk," by Doctors of Medicine. We who are supposed to be a confidant of patients—we who should not divulge things we see or hear in the lives of men which ought not be spoken abroad—we are now the small time gossip mongers.

Our attitude towards our fellow associates is at times sordid and even sadistic. When we should hasten to their defense, we decry their methods and results. Is it impossible for us to work together for the greatest good for all patients, forgetting petty jealousies, competition and personal gains?

Other salient causes are:

1. Indifferent public and doctor-patient relations.
2. Indifferent inter-professional relations.
3. Too few consultations.
4. The attempt to practice law whenever a claim is possible.

This association cannot afford to lose \$100,000 annually. We may be forced to place the blame where it rightfully belongs. Surely the minds of the members of this association are capable of being excited without the application of gross or violent stimulants.

Before offering any criticism of your fellowman, ask yourself this question, "Vas you der Sharlie?"

H. M. Clare M.D.

President



MORE THAN STONE AND MORTAR . . .

More than stone and mortar is this beautiful new home of the Oklahoma State Medical Association. Rather, it is the product of fifty years' work for better health in Oklahoma.

On the following pages, you will be taken on a picture tour through your new building . . . better still, plan to make a personal inspection at your earliest convenience.

Indeed, this striking contemporary building is a fitting tribute to the efforts of past generations of physicians and an appropriate symbol of progress in medicine, to which the O.S.M.A. is pledged.

Exterior building materials blend perfectly with the suburban building site; their ruggedness materially expresses the permanency of organized medicine. Solid masonry walls and a clay tile roof add to this lasting quality.

Your new home is conveniently located on the outskirts of Oklahoma City at 601 N. W. Expressway (U.S. 66 Bypass). As you turn off the Expressway, a circular front drive brings you to a covered entranceway which forms a protective porch for the glass-framed doorway.

Walls of Clarksville limestone give the foyer an air of informality; mahogany trim stained a rich brown lends interesting contrast in texture. Parchment-shaded overhead lamps diffuse soft light and potted greenery adds to the hospitable atmosphere. Furnishings by Knall Associates provide a finishing touch to the contemporary setting.



The interior is equally divided between two basic areas: an office area where the daily activities of your full-time staff are carried out and a meeting area where your committees function and your Council and House of Delegates meet frequently to form major policies.

Your tour will be through the east wing of the building first where you will see the rooms which comprise the meeting area.



Pictured above is a view of the east wing as seen from the chairman's seat in the large Council Room. A folding wall of plastic separates the kitchen from the Council room. The hall at the right leads to the west wing.



At left is the small conference room which provides adequate seating for twenty persons. The soft luster of stained mahogany paneling gives this room a gracious atmosphere. The furnishings of the room repeat the tans, dark browns and whites of the horizontally striped draperies.



The focal point of this impressive Council Room is a stylized, white caduceus set against a warm brown-colored background. Again the stone wall is repeated. The Council Room is designed to seat one hundred. Parking facilities for one hundred cars are located at the rear of the building.



The secretarial area, the executive offices, **Journal** area, work room and central filing room are located in the west wing of the building, behind the attractive reception desk pictured above.

The receptionist and secretaries have the most modern office equipment, including electric typewriters. Electrical outlets are located in the floor at each desk site.

Decorated in pastel colors, this area features a built-in stone planter and carpeting at each desk location.



The office of Executive Secretary is located on the south side of the secretarial area. Rich mahogany paneling and stone walls are impressive features of this office.

Adjacent to the Executive Secretary's office is the office of the Associate Executive Secretary, pictured right. This office repeats the mahogany-stone decor. The furnishings are walnut in contemporary design.



The central filing system is located immediately behind the general offices. The subject-filing system contains records of all Association activities as well as individual folders on every member of the Association.



The **Journal** office is adjacent to the secretarial area, separated by a built-in desk. The mahogany bookcases provide sufficient room for recent issues of the **Journal**, bound volumes of all past issues and exchange copies from other medical organizations.

Special Articles

This is the second in a series of articles prepared by the University of Oklahoma School of Medicine

The SCHOOL of MEDICINE

JOHN W. DeVORE, M.D.

In the first of this series of articles on the problems of the University of Oklahoma Medical Center, basic problems were discussed and then related to the Department of Pathology. In this, and subsequent articles, we will discuss other aspects of the Medical Center and their relation to specific departments.

The Department of Pharmacology, with Doctor Arthur Hellbaum as the chairman, has been outstanding in its increasing service to the physicians of the state and their patients. Doctor Hellbaum has been a leader in the development of postgraduate medical education, which now provides numerous short courses for physicians. The Poison Information Center, under the direction of Doctor H. A. Shoemaker, has been of repeated assistance to many of us who see patients either with acute poisoning or with some toxicological problem. (Journal O.S.M.A. Sept. 1956).

Doctor Hellbaum and the members of the Department of Pharmacology have summarized the aims and objectives of the department: "It is our ambition to build a department, in terms of facilities and personnel, which would be second to none in our geographic area, and comparable to any in the nation, in order to: (1) offer our medical students the best possible instruction in a field that is growing continuously in importance and complexity; (2) train our share of the future pharmacologists for teaching, industry and such agencies as the Food and Drug Administration; (3) participate even more widely in postgraduate and refresher training of practicing physicians and offer the medical profession in our state an improved advisory service on new drugs and therapeutic techniques; (4) improve our consulting service to the medical profession, to industry and to the public at large in the

THE AUTHOR

John W. DeVore, M.D., Instructor in the Department of Medicine at the University of Oklahoma School of Medicine. In the preparation of this paper Doctor DeVore had the encouragement and cooperation of the Faculty Board which is made up of the Department Heads of the School of Medicine.

field of toxicology and the potential hazards of drugs and chemicals; (5) afford research opportunities to our staff, so that their maximal potential can be utilized, unhampered by limitations of work space and equipment."

Certain of the factors which limit members of the Department of Pharmacology in their endeavors to fulfill the above roles apply not only to this department but to all departments in the basic science division of the Medical Center. The inadequacy of the salary scale (which is \$1,000 to \$5,000 a year below the national average) applies here as previously discussed for the Department of Pathology. There has been no general cost-of-living increase in salary for the teaching staff in the last six years. A token increase, in the fall of 1955, was made at the expense of the operating budgets of the various departments. These operating budgets were simultaneously reduced 10 per cent. Salary adjustments in state institutions can rarely be made more often than once in two years, in contrast to private enterprise where annual or even more frequent adjustments are customary. Because of insufficient funds for personnel, there has been no possibility of maintaining an adequate salary scale and no provision for automatic salary increases for merit or longevity. The report of the Department of Pharmacology points out that if it had attempted to employ any one of its four Ph.D. graduates of the past three years, it would have had to offer within \$500 of the present salary of a full professor with 35

years of service to the University of Oklahoma. The basic science departments are losing young promising teachers at a rapid rate because they have found that, after two years, deserved salary increases have not been forthcoming.

The cost of every item the department must purchase—from fixed equipment to experimental animals—has risen steadily during the last ten years. There are many items of equipment which would improve teaching that could not be purchased because their first cost could not be borne by the annual operating budget, and no provision could be made to allocate funds for this purpose to the various departments. As a result, much of the routine teaching equipment has become antiquated or worn out and cannot be replaced.

Graduate teaching is the challenge which keeps the faculty alert and progressive and sets the standard of teaching at all levels of instruction. There is active competition for graduate students among the schools of the country, which offer fellowships carrying a stipend amounting to at least subsistence for a single person. Such fellowships are justified by the fact that these students participate in the teaching program of the department during the later stages of their training. At present, it is necessary for our school to depend on governmental or philanthropic agencies for the fellowships. Provision should be made in the budget of the department for this work.

Funds for support of research projects are fairly easy to obtain from a variety of sources. However, it is necessary for the applicant to provide working space, laboratory facilities and animal facilities. The inadequacy of the present facilities are demonstrated by the fact that fifteen people in the Pharmacology Department are working in six small laboratory rooms on projects supported by more than \$20,000 in grants-in-aid. The need for additional animal facilities of all types has been stressed not only by the Department of Pharmacology but by a majority of the basic science and clinical departments in the Medical Center.

The Department of Microbiology, under the capable leadership of Doctor Florene Kelly, is responsible for the teaching of bacteriology, mycology, virology and immun-

ology to medical students, student nurses, graduate students and special students, such as laboratory technicians. Handicapped by problems similar to those already described, the members of this department have made valiant efforts toward constant improvement of their teaching program and the development of a research program. The present budget permits the department to have only one technician, a halftime secretary, and two student assistants to aid with routine procedures. Despite this handicap, the department has been able to provide training for more graduate students than any other preclinical department in the Medical Center. In addition to the inadequacy of the personnel, the department has been unable to purchase any new permanent equipment in more than a year. The supplies of glassware have been depleted because of inadequate funds to replace them during the last five years.

To fulfill the immediate needs of the Department of Microbiology, the only additional professional faculty member needed would be an immunologist. There is no one qualified in this field at the Medical Center. Such an individual is needed not only in the teaching program of this department but as a consultant to other departments of the medical school and to the physicians and hospitals within the state.

The technical personnel had to be reduced to one in 1956 because funds were inadequate. The professional personnel of the department have had to carry out the duties of the needed additional technologist. The members of the department also have found it necessary to do much of their own stenographic work. If the professional staff could be relieved of the technical and non-technical duties which now hamper its teaching and research activities, not only could the teaching program be improved but an adequate research program could be developed within the department which would, through grants from private agencies, provide even more technical and graduate assistant help. The inadequacy of space for professors and for the research program is similar to that found in the Department of Pharmacology. If adequate space could be provided, the department will receive grants for a tissue culture laboratory for virus studies and a bac-

terial irradiation project. In addition, the routine work of the department is hampered and must be discontinued at times during the high temperatures of summer due to the lack of adequate ventilation and air conditioning. This threatens to destroy not only the routine work of the department but the stock cultures, which have required years of work to produce. The quarters for experimentally infected animals are totally inadequate.

A detailed budget for the department was provided to the author for study prior to preparation of this article. Although the budget represented an increase over that previously attained, the salary schedule and the funds requested for equipment and maintenance were considerably lower than in any private hospital or clinic in the state.

Doctor Peter E. Russo has given to the Department of Radiology in the University of Oklahoma Medical Center the leadership necessary to maintain a competent and progressive department at the expense of a tremendous amount of his time, effort, and personal sacrifice. He has done so despite the fact that he has been hampered by inadequate space, equipment and personnel. The department has become so large and the workload so heavy, that it has become impossible for any part-time radiologist to meet the situation adequately. A full-time chairman of the department has, therefore, been appointed recently. The recommendations for the appointment of the chairman and for a revision of the Radiology Department have come from a committee of five radiologists with Doctor John R. Danstrom as the chairman. All of the members of the department have given their time in the past to accomplish the objectives, which include teaching of medical students and student technicians, development of an adequate residency training program, and the service functions necessary to provide a adequate diagnostic and therapeutic facilities for the Medical Center. The committee recommended not only the appointment of a full-time chairman of the department but strongly recommended additional professional personnel. The x-ray therapy service in the University Hospital has grown until last year nearly 1,000 patients received treatment—with a daily patient load of 30 to 50 treatments. The treat-

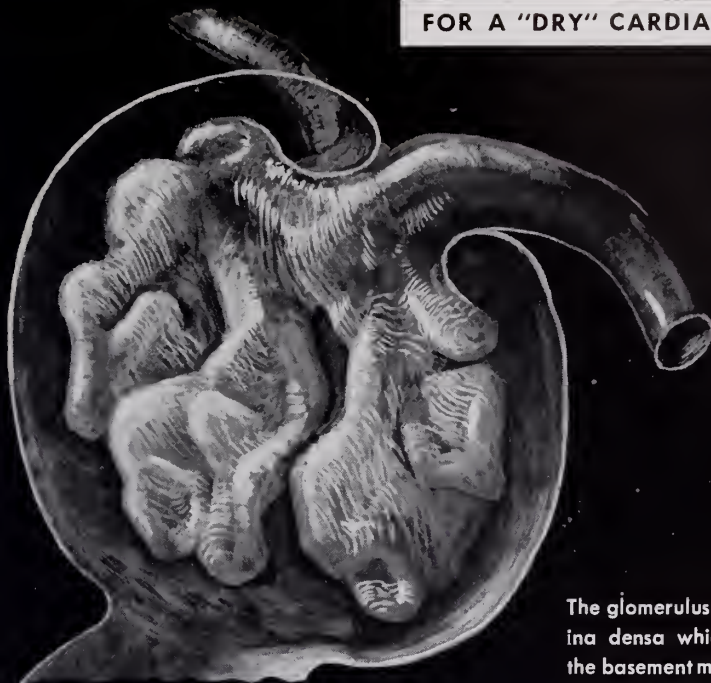
ments, of necessity, were given by technicians from preliminary orders by the radiologists. Since technicians are not qualified to judge whether to stop treatment short of the prescribed dose, to give more than is prescribed, to treat radiation sickness, or to do the many other things necessary to adequate medical care, the appointment of a full-time radio-therapist is essential. The patient load, the many consultations in clinics, and the teaching duties, are more than sufficient to keep two additional full-time men occupied.

In addition to the professional staff, the committee felt that it would be essential to increase the number of technicians and non-professional personnel within the department. The total of increased salary requirements of the department would approximately double the present budget.

The workload in x-ray diagnosis and x-ray therapy has grown so rapidly in the past few years (and will continue to increase in the coming years) that the present space and equipment is not sufficient to handle the patient load. Recommendations include: immediate purchase of an additional diagnostic x-ray machine, remodeling and enlarging the present dark room and the building of an entirely new dark room within the foreseeable future. Much of the other equipment in the department needs to be replaced as soon as possible with modern equipment adequate to carry the heavy requirements. To accomplish the minimal requirements for replacement of old equipment and purchase of much-needed new equipment would be approximately \$60,000 per year through June, 1959.

The teaching program of the Department of Radiology has been maintained through the personal sacrifice of the various members of the department. Despite the considerable time spent by the members in the service function in the University Hospitals and Outpatient Clinic, the lack of equipment and personnel has made prompt and adequate care of patients in all of the clinical departments impossible. It is, therefore, necessary to provide a budget which is adequate for the minimal personnel and equipment requirements in the immediate future and for additional support for a well balanced departmental program as soon as is practical.

FOR A "DRY" CARDIAC PATIENT . . .



The glomerulus is invested in the lamina densa which is continuous with the basement membranes of the outer capsular epithelium.

Illustration by Hans Elias

Rolicton® Diuresis Maintains Continuous Edema Control

The efficacy of Rolicton (brand of amiso-metradine) in maintaining diuresis in the edematous patient has been established on an average dosage of one tablet b.i.d. Larger doses may be given as initial therapy and as maintenance therapy in edema difficult to control. Many patients will respond to one tablet daily.

"The margin of safety and the diuretic index is certainly an improvement over the use of oral mercurial diuretics."¹

Avoiding "Peaks and Valleys"

A highly desirable effect, and one which has been made possible with Rolicton, is the maintenance of continuous diuretic effectiveness day after day over an extended period, to avoid the up-and-down weight pattern typical of other edema-control methods.

"There was an obvious stabilization of weight in practically all of the patients under observation, and previous wide fluctuations in poundage disappeared."²

Mercury-Sparing

Typical of the Rolicton diuresis pattern is the ability of the drug to reduce and, in a large percentage of patients, to eliminate the need for mercurials parenterally.

"... the drug represents a most useful addition to our armamentarium in the treatment of edema, not only because it can be given orally ... but more so because it permits [us] to replace or to spare the ... mercurials."³

G. D. Searle & Co., Chicago 80, Illinois.
Research in the Service of Medicine.

1. Asher, G.: Personal communication, June 23, 1956.
2. Settel, E.: A Clinical Evaluation of a New Oral Diuretic, Rolicton, Postgrad. Med., Feb. 1957, in press.
3. Goldner, M. G.: Personal communication, June 29, 1956.

SEARLE

What They're Saying

Dwight H. Murray, M.D., President of the American Medical Association, delivered the following address before the House of Delegates at the recent AMA Meeting in Seattle.

The Delegates were so impressed with Doctor Murray's words that they adopted a resolution calling for wide dissemination of his speech. In view of the importance of this timely message, the Journal is pleased to cooperate with the resolution by reprinting Doctor Murray's speech in its entirety. Ed.

FREEDOM IN MEDICAL PRACTICE

Dwight H. Murray, M.D.,

President, American Medical Association

Almost six months have elapsed since we last met to deliberate and act on medical affairs. The time has passed quickly, but not quietly.

The rumble of war and revolution has resounded in our ears. The din from political battles has been deafening.

All of us . . . sooner or later . . . learn that today's events do not just swirl around us, but involve each of us. As doctors we cannot get away from them by claiming that our only interest is in the sick, and that we cannot be bothered by political, social and economic problems. These matters demand attention from the doctor as well as the lawyer, the businessman, the newspaper editor, the labor leader and the worker.

If we are concerned about what happens on the international, national and local fronts—and we should be—then certainly we cannot afford to be disinterested in what happens in our own area of health and medical affairs. Yet there is apathy in our ranks.

Replace Apathy With Active United Profession

Today there is a greater need for a united, forceful and informed profession than ever before. We have been caught in the throes of a social revolution which demanded some-

thing for nothing. Changes have been taking place all around us, and medicine has not escaped unscathed.

For example, in a few days Public Law 569, the bill providing medical care for military dependents, becomes effective throughout the land. Contracts already have been signed with the government by the majority of our state societies. No longer can any doctor claim that this law does not affect him. No longer can he say that government laws really are not changing the practice of medicine.

Public law 880, better known to all of us as H.R. 7225, is another case in point. Medicine now is facing the problem of protecting the taxpaying public from abuses and of cooperating with the government to carry out the provisions of the law. The law is now on the books, and we must provide the leadership necessary to make it work as well as possible.

It was encouraging to hear Ezra Taft Benson, secretary of agriculture, say last week before the American Association of Land Grant Colleges and Universities:

"Sooner or later, the accumulation of power in a central government leads to a loss of freedom . . . Raids on the federal treasury can be all too readily accomplished by an organized few over the feeble protests of an apathetic majority. With more and more activity centered in the federal government, the relationship between the cost and the benefits of government programs becomes obscure. What follows is the voting of public money without having to accept direct local responsibility for higher taxes . . .

"If the present shift of power from state to federal authority which started 25 years ago is allowed to continue, the states may be left hollow shells."

It was encouraging to hear such comments from a member of the President's Cabinet. I only wish that all members of the official family, and more important, every member

of the United States Congress, felt the same way.

The expression of this philosophy, with which medicine so heartily agrees, sounds good, but putting it into practice is the thing we are really interested in.

Today the medical profession along with business and industry is caught between those who desire to promote sound government and those who desire even more intensely to perpetuate party power. Unfortunately, in recent years a benevolent federal government appears more attractive to the voting public than the preservation of individual freedom. Medicine must do its utmost to reverse this trend.

Medical Freedom Essential

In my travels around the country as your representative the last 18 months, I have seen little dissension or rancor within our ranks. However, I must report that I have seen too much complacency over governmental encroachment into medical affairs. And I am deadly serious when I say to you that apathy by the few, or by the many, can be detrimental to all.

No nation can merely reap the benefits of freedom; it also must sow seeds of freedom.

In medicine the situation is the same. If an apathetic medical profession takes its freedom for granted, it will be the beginning of the end. A strong, free profession must work for freedom so that it may live in freedom. And history tells us that once medicine loses its freedom, other fields of private endeavor are immediately in danger.

I do not wish to paint a dark or distorted picture of medicine's free status and its stature in America today. But I do believe words of caution and an appeal for vigilance are in order.

The road of apathy and disunity can only lead to disorder and perhaps disintegration, and we must sound a warning to all our colleagues who don't care, or who are pulling in the opposite direction. The road of alertness, action and unity is the proper road for all of us to be traveling together.

If I had just one wish for the coming year, it would be to command the time and talents

of the 160,000 physicians in the American Medical Association. I would set us all to the task of emphasizing and re-emphasizing the absolute necessity of patient and professional freedom.

Patient's Right to Choose His Doctor

I believe it is one of our prime responsibilities to prove to our patients that their right to choose their doctor is a most important one.

Free choice brings a bond of confidence between doctor and patient which no compulsory medical system can create. It means that the patient knows the physician will be interested in him as a person, not as just a serial number of the 2:45 appendicitis case.

For the doctor free choice means that the patient has selected him for his abilities, training, sincerity and personality. When a patient comes into my office, I know he has made a choice. And from that moment there begins a physician-patient relationship of the highest order. To me the patient is someone special, and I in turn hope I am someone special to him.

Once the patient has made his choice, the physician automatically assumes an unqualified responsibility to the patient. No system of medical care that uses a third party to bring doctor and patient together can match our kind of cooperative performance for the treatment of illness, the cure of disease and the betterment of the patient's health.

Freedom to select a doctor is part of everyone's great freedom to choose—to choose what he wears and eats; where he works and worships, and how he votes. Take away any part of this freedom and great damage is done to our democratic system.

Free Conduct in Medical Treatment

Another freedom closely tied to freedom of choice is freedom in the conduct of medical treatment.

As the recent meeting of the World Medical Association in Havana, Cuba, Doctor Rolf Schloegell of Germany made a stirring defense of free conduct of medical treatment. He told us that the medical profession believes the attending physician alone is competent to decide what measures he

deems necessary and will apply in order to bring about the desired improvement. He warned too of the danger of excessive restriction on the freedom of the patient and the attending doctor.

Yet the trend toward extending social security in the medical care field has been steady and has accelerated since the end of World War II.

The dangers of shifting responsibilities for medical care from the patient and doctor to the government are obvious. The caliber of medical care cannot be as high when both patient and doctor are dependent upon government. Initiative succumbs to dictation, and self-reliance is replaced by the crutch of government.

We do not deny that there is an area of legitimate concern by the government for the health and welfare of the people. But each year government seems to extend that area. We get some idea of this expansion from the new federal medical budget.

This year, according to our Washington Office, the average family will be paying \$54.61 for the U.S. Government's health and medical activities. And the total expenditures this year amount to 2½ billion dollars—290 millions more than last year. Even in an over-all federal budget of 61 billion dollars, the total health cost of 2½ billions is not insignificant. It is a billion dollars more than the cost of running the Commerce Department, half a billion more than the Agriculture Department and six times more than the Interior Department's budget.

Many expenditures obviously are necessary to keep up our unsurpassed public health standards, and research may pay rich dividends in scientific discoveries. But there is no doubt that much money is being spent on medical activities that should not involve government participation.

The trend is to spend more and more government money on health and medical matters because it is good politics. Apparently many Americans still want to see government in the role of a big brother, dishing out so-called gifts and bargains under the guise of benevolent economic planning.

I believe it is our duty, as it is everyone else's, to combat the attitude of "what's in it for me?" And to promote the long-honored

creed of "what is best for all Americans and our free society?" I think that a nation can drift into state medicine inch by inch just as surely as if the scheme were foisted upon a people overnight. The "drift" method may take longer but the result will be the same.

So it is time all of us sounded the alarm against soft and superficial security and against the invasion of personal responsibility. It is time we stood up together for militant freedom and for full rights and responsibilities of the individual.

Belgian Doctors Turn Back Government

There is no better example of what a unified medical profession can do than in the story of the recent fight of the Belgian doctors against the government's proposals for a state service of medicine.

Without consulting the medical profession the Belgian government proceeded to draft rules and regulations of health to be incorporated in the nation's social security legislation. Under the proposals doctors were to sign an agreement to abide by the present rules and any later regulations. For the patient there would be the usual red tape in getting medical care.

When the Belgian doctors learned of the scheme, they met in conference with the government. They told the government what they wanted and what they would not accept. The government agreed.

For several months everything was quiet. Then the Belgian doctors suddenly read about the new health bill that the government was sending to Parliament. It was quite contrary to the earlier agreement worked out by the profession and the government. But the bill was passed quickly.

The Belgian medical profession protested and said it would not be placed under the Ministry of Labor. Instead the doctors proposed to set up their own plan of medical assistance.

Before long, the government saw that the medical profession meant business and that the doctor's plan was an attractive one. So it declared that its own bill was not in force and could not be in force without the consent of the medical profession.

To me this fight against legislative intervention in medical care is excellent evi-

dence that the profession can defend itself if it unites to defend the basic principles of freedom and if it offers constructive proposals. By using the Belgian national motto, "in union there is strength," the medical profession showed doctors everywhere that dangerous government plans can be turned aside by the strong.

I also read recently in the *Journal* of the World Medical Association of the fight of the medical profession of Malta against a British government scheme to introduce a full-time salaried medical service, without the right of private practice, on an island dependency of Malta. Here again the doctors reacted with unity and strength, and successfully thwarted the government's plan.

There is a lesson in these stories from Belgium and Malta. They prove that a unified profession has a great political power for good—the good of the patient, the doctors and the nation.

Confidence and Understanding Needed

While we are developing unity within our own ranks, I believe it is equally important to continue to build up the confidence and respect of our patients and to make our legislators aware of the necessity for freedom in medical practice.

Let us never reduce the quality of service we render to our patients, and never lose the personal touch in medicine. Where there is any opportunity to improve upon our medical care, let us seize it and show our abilities to do an outstanding job. Satisfied patient-customers will give us deserving support when we need it.

We also should realize that the destiny of medicine can be determined to a large degree in the halls of Congress. If this be true, then it is even more important that we take an even greater interest in those who elect the Congressmen. Sympathetic understanding of our position by federal legislators through the voting public will be an insurmountable deterrent to the forces supporting state medicine.

The day has come, gentlemen, when we can no longer look upon medical economics and social changes merely as issues to be considered during our limited leisure hours.

Our interest in them cannot be superficial or intermittent.

We now must pay daily attention to these matters. Medical socio-economic affairs can no longer be just incidental with us. They must be a vital part of our life and of our profession.

Each of us, I believe, should dedicate himself to the words included in the oath of office taken by Presidents of the AMA:

"I shall champion the cause of freedom in medical practice and freedom for all my fellow Americans."

As doctors, representatives to the AMA and as spokesmen for the AMA, let's remember these words and live by them. And to alter a phrase of President Lincoln's only slightly: Let's make common cause to keep the good ship of medical freedom on this voyage, or nobody will have a chance to pilot her on another voyage.

A. M. A. Calls Regional Legislative Conference

The Washington, D. C., office of the American Medical Association called a Regional Meeting of representatives of the Oklahoma and Arkansas State Medical Associations on January 10, 1957. The meeting was held at the Ward Hotel in Ft. Smith, Arkansas.

The purpose of the meeting was to discuss the legislative matters that will come before Congress during the coming session.

Of particular significance was the announcement that Representative John Jarman of Oklahoma is now a member of the House Committee on Interstate and Foreign Commerce which handles most health legislation.

Representing the A.M.A. was Cyrus Maxwell, M.D. With him was George E. Connerly, editor of the A.M.A.'s *Washington News Letter*.

Physicians representing the Oklahoma State Medical Association were: John E. McDonald, Marshall Hart, G. R. Russell, and Walter R. Sanger, all of Tulsa; Malcolm Phelps, El Reno; Vernon D. Cushing, Oklahoma City; and H. M. McClure, President, of Chickasha. Also with the Oklahoma delegation were Dick Graham, Oklahoma City, and Jack Spears, Tulsa.

Association Activities

Carl Puckett, M. D. Awarded 50 Year Pin

Carl Puckett, M.D., Oklahoma City, was recently awarded a "Fifty Year Pin" and admitted to membership in the "Fifty Year Club" of the Oklahoma State Medical Association. The pin was presented by W. A. Howard, M.D., Chelsea, at a regular meeting of the Roger-Mayes County Medical Society held in Pryor.

Soon after graduation from the St. Louis College of Physicians and Surgeons in 1905, Carl Puckett, M.D., located at Pryor Creek, Indian Territory, the present day city of Pryor. He was admitted to membership in the American Medical Association in October of that same year.

In the spring of 1906, Doctor Puckett was asked by a few leading physicians to act as secretary and organizer of the Northern District Medical Society which then comprised Cherokee Nation. At the organizational meeting held in Pryor, April, 1906, he was elected to the office of Secretary-Treasurer of the Society. He served one term as president after statehood.

The Mayes County Medical Society was organized immediately after statehood and Doctor Puckett was chosen Secretary-Treasurer, a position he held much of the time until late 1923 when he moved to Oklahoma City. Even as an Oklahoma City resident, Doctor Puckett continued his membership in the Mayes County Medical Society, representing them in the House of Delegates of the Oklahoma State Association. With three intermissions, he held this position until 1950.

Doctor Puckett has missed only three annual meetings of the Oklahoma State Medical Association since 1909. Two of these meetings occurred while he was serving with the army in World War I and the third occurred when the state meeting conflicted with a national one.

Following statehood, Doctor Puckett was chosen physician for the Whitaker State Home, a position which he held for seven years.



RECOGNITION OF 50 YEARS' SERVICE—Carl Puckett, M.D., (center) receives his 50 Year Service Pin from Walter A. Howard, M.D., (right) Chelsea, long-time friend and past president of the Oklahoma State Medical Association. Looking on is the secretary of the Rogers-Mayes County Medical Society, Clarence B. Pinkerton, M.D., Pryor.

In 1915, he was appointed County Superintendent of Health for Mayes county and served in this capacity until the end of 1923, with the exception of his two years of military service.

Governor M. E. Trapp appointed Doctor Puckett State Commissioner of Health in January, 1924, where he worked until the close of the administration in 1927.

Soon after his term as State Commissioner of Health, Doctor Puckett was chosen Managing Director of the Oklahoma Tuberculosis Association, the position in which he serves today.

C. L. Johnson, M. D., Attends National Polio Conference

C. L. Johnson, M.D., of Bartlesville represented the Oklahoma State Medical Association at a national session called by the American Medical Association to plan and promote a gigantic polio vaccine program. Doctor Johnson serves the O.S.M.A. as Chairman of the General Health Committee.

The A.M.A. Board of Trustees called the national meeting to be held in Chicago's Palmer House on January 26.

O.S.M.A. Council Meeting Held January 20

The Council of the Oklahoma State Medical Association met at the Executive Offices in Oklahoma City on January 20. The purpose of the meeting was to solve current problems of the Association and establish future programs.

Highlights of the agenda included discussion on (1) the meeting called by the American Medical Association to plan a 1957 promotion program for polio inoculations through channels of private physicians; (2) the hospital and medical care program for public welfare recipients which will go into effect July 1, 1957; (3) the legislative proposal of the Oklahoma State Board of Medical Examiners; (4) the present status of malpractice insurance; and (5) the possibility of having a "Health Cavalcade" during Oklahoma's Semi-Centennial celebration in Oklahoma City.

Three New County Societies Organized

The Council has approved creation of three new county Medical Societies.

The tri-state County Medical Society which previously had been made up of physicians from Choctaw, McCurtain, and Pushmataha counties has been realigned. There has been created the Choctaw-Pushmataha County Society and the McCurtain County Medical Society.

In addition to these two new societies, the physicians in Murray county who have previously belonged to either the Pontotoc or the Carter-Love-Marshall Societies have been issued a charter for the Murray County Medical Society.

Officers for the Murray County Medical Society are: W. D. DeLay, M.D., President; Jerrold F. Stibal, M.D., President-elect; D. M. Eggenberg, M.D., Vice President; Will G. Crandall, M.D., Secretary-Treasurer.

Ritzhaupt Wins Senate Seat

Louis H. Ritzhaupt, M.D., of Guthrie won the recount in Logan county and will again be a familiar sight in the Senate where he has done so much for medicine.

26th Legislature Convenes

The 26th Legislature convened on January 8, 1957, breaking a long-established precedent by calling a night session. Governor Raymond Gary addressed the joint meeting of the House and Senate.

Governor Gary did not outline any specific health program in his message to the Legislature. However, the Governor did approve giving two and a quarter million dollars in moneys to the State Mental Health Program.

Committees Appointed

Speaker of the House B. E. Harkey made the following appointments to the House Professional and Occupational Regulations Committee: Davis Wilson, Chairman, Dem., Fairland; Dale Kite, Dem., Hollis; Lewis Bohr, Rep., Watonga; J. E. Bouse, Dem., Laverne; C. R. Nixon, Rep., Tulsa; Rex Sparger, Dem., Ardmore; Robert L. Bailey, Dem., Norman.

Serving on the State Public Health Committee are House members: Guy O. Baily, Dem., Ponca City; Clarence Sweeny, Dem., Clinton; Robert L. Goodfellow, Dem., Anadarko; William H. Skeith, Dem., McAlester; and Bucky Buckler, Dem., Konawa.

Appointed by Speaker Pro Tem Boyd Cowden to serve on the State Public Health Committee were the following senators: Howard Young, Dem., Stigler; Robert Breeden, Rep., Cleveland; K. C. Perryman, Dem., Clinton; Glen Collins, Dem., Seminole; J. R. Hall, Jr., Dem., Miami; and Virgil Young, Dem., Norman.

Bills Introduced

On the second day of the session, Representative J. D. McCarty, Oklahoma County, introduced eight bills to the House pertaining to narcotics. However, none of these affected in any way the use of narcotics, barbiturates, and amphetamines in professional use. The bills pertained to penalties for the transportation and illegal uses of these drugs.

In the Senate, a bill to place blood typing on drivers licenses was introduced.

Governor Gary has sent to the Senate nominations for C. R. Rountree, M.D., from Oklahoma City and Merrill Whitney, M.D., of Okemah to succeed themselves on the State Board of Health.

A.M.A. To Sponsor Series Of Legal-Medical Symposiums

The American Medical Association will sponsor three regional Medical-Legal Symposiums in March, it was announced by C. Joseph Stetler, Director of the Law Department of the Association.

During the fall of 1955, the A.M.A. sponsored a sequence of this type for the first time. So fruitful were these initial Legal-Medical Conferences that this second series has been planned.

The first in the series of three symposiums will open in the Atlanta-Biltmore Hotel in Atlanta, Georgia, on March 15-16. The Cosmopolitan Hotel in Denver, Colorado, will host the second meeting March 22-23. Climaxing the series will be the symposium at the Benjamin Franklin Hotel in Philadelphia, Pennsylvania, on March 29-30.

In each instance the meeting will begin with registration at 12:00 noon on the first day which will be Friday. Both the Friday program and Saturday session will be concluded at 4:30 p.m.

The attendance for each regional symposium will be somewhat limited with audiences ranging in size from 300 to 350 and divided as evenly as possible between physicians and attorneys. Anyone interested in attending should register in advance and as soon as possible with the A.M.A. Law Department, 535 N. Dearborn Street, Chicago 10, Illinois.

A program of interest to doctors and lawyers alike has been planned. Some of the subjects which will be discussed, according to tentative plans, are: trauma and disease, medical expert testimony, the medical witness and a mock trial demonstration concerning the introduction in court of results of chemical tests for intoxication.

The general expenses of the meeting will be paid by the A.M.A.; personal expenses of the individual participants must be paid by the individuals themselves or by the state or county society they represent. Registration fee for each conference is \$5.00 which will cover the cost of the luncheon on Saturday and any proceedings of the meeting that may be published.

Medicare in Operation

As we go to press this month, Medicare has been in operation over two months. Still there is a shortage of forms which will perhaps continue for awhile.

The profession is reminded again that the payment of bills and the securing of additional forms will be through the Blue Cross Plan in Tulsa who is acting as the fiscal agent for the Association. However, any matters of policy, fees or related matters should be directed to the executive offices of the Oklahoma State Medical Association.

The Medicare Committee also urges all physicians to personally acquaint themselves with the fee schedule in the manual rather than leaving the interpretation of the procedures done under Medicare to their office assistants. The committee has already had it called to its attention that numerous fees charged under the program possibly have not been correct and the physician has not received as large a remuneration for his services to which he was entitled.

The profession is also urged to be certain that all questions on the form are properly answered with particular reference to question 29.

Scholarship Is To Honor Late Tulsa Physician

A scholarship to Technion, the Israel institute of technology, has been awarded in Haifa as a memorial to the late Morris B. Lhevine, M.D., widely-known Tulsa X-ray physician who died last year.

Decision to award the scholarship was made as a token of respect to Doctor Lhevine who had been interested in the new state of Israel and a contributor to the advancement of technical education in the nation.

Doctor Lhevine was a native of Russia and came to the United States in 1906 and to Oklahoma in 1913. He attended the University of Oklahoma school of medicine and opened practice in Tulsa in 1909.

He was director of the Hillcrest Medical Center X-ray center for many years and operated offices in the basement of the Medical Arts building.

O.S.M.A. To Sponsor "Cavalcade of Health"

The Council of the Oklahoma State Medical Association recently approved the sponsorship of a health show for the general public. Termed the "Cavalcade of Health," the educational show will be a vital part of Oklahoma's Semi-Centennial Exposition which will be held in Oklahoma City, June 14-July 7.

Henry H. Turner, M.D., Oklahoma City, has been named chairman of the Association's committee which will plan and direct the show. According to Doctor Turner, "the Cavalcade idea presents organized medicine, as well as other related medical groups and organizations, with the best opportunity we've ever had to bring a health education message to the public."

Exposition To Be Nation's Largest

The Exposition itself will be the largest affair of its type to be held in the United States in 1957. To date, ticket commitments have reached the 675,000 mark, with total attendance estimated at 1,500,000 persons.

With a general theme of "Arrows to Atoms," the Exposition will depict the great progress that has been made in the past fifty years of Oklahoma's history, from frontier days to the present age of automation and nuclear science. The extent to which national manufacturers are participating indicates the world's fair magnitude of the show. Major automobile companies will spend about \$250,000 each in the preparation of their displays. Over twenty foreign countries will exhibit.

Many Celebrities Due

Some of the nation's outstanding personalities will be on hand to help Oklahoma celebrate. Such well known names as Perry Como, Esther Williams, Tennessee Ernie, Lawrence Welk, Patti Page, Pat Boone and Dinah Shore are but a few of those who will make special performances during the 24 day show. Dave Garroway and Steve Allen will originate several national television broadcasts from Oklahoma City.

Health Progress To Play Vital Role

Exposition officials have stated that the "Cavalcade of Health" will receive one of the top priorities in all advertising and publicity. Full page color advertisements will be placed in *Life* magazine in addition to advertising which will be carried in several hundred newspapers over the country.

Formation of Health Show Underway

Doctor Turner said that potential exhibitors have already been invited to join the State Medical Association in forming the health show. "We have already secured one of the best buildings on the fairgrounds and now all that remains is to interest other organizations into participating with us and helping us underwrite some of the costs." He explained that voluntary health agencies, related medical groups, official state agencies and ethical pharmaceutical manufacturers have been asked to participate. The American Medical Association has agreed to send 26 of their best health education exhibits to Oklahoma City.

To date, affirmative replies have been received from ten other agencies and organizations. With 75 exhibit booths to fill, Association representatives are accelerating their efforts to acquire co-sponsors. "The excellent response that we are getting," Doctor Turner said, "indicates that we will receive the necessary degree of cooperation from other groups to enable us to present the best health education show in the United States for 1957."

Charles Wilbanks, M. D., Elected To Presidency of Tulsa A.G.P.

Charles Wilbanks, Tulsa physician, was chosen president-elect of the Tulsa Academy of General Practice. He will take office in 1958.

Wendell Smith, M.D., who was elected last year, took office as president on January 1, succeeding Wilkie Hoover, M.D.

Other officers are Homer D. Hardy, M.D., Vice-president; and Harlan Thomas, M.D., Secretary-Treasurer.

Closed Circuit TV Will Highlight State Convention

A closed circuit television presentation featuring nationally known medical personalities as guest speakers will be a highlight of the 51st Annual Meeting of the Oklahoma State Medical Association in Tulsa, May 6-8, 1957. The subject of the hour-long program will be "Psychiatry In General Practice."

Sponsored by Smith, Kline & French Laboratories, the special event will emanate from Chicago, Illinois, and will be beamed to five state medical associations holding annual meetings at the time. It is scheduled for Monday, May 6th, at 2:00 p.m., in the Crystal Ballroom of The Mayo.

The program will feature three types of cases seen in daily office practice: the mild patient, the in-between, and the serious. Clinical cases will be discussed by a panel of four prominent psychiatrists and internists to be announced later.

The picture will be projected on a new type of TV screen approximately six feet high and eight feet wide. A hook-up via telephone with the local Tulsa audience will enable Oklahoma doctors to ask questions directly of the participants.

Dr. Edward L. Moore, Chairman of the Scientific Works Committee, has announced that applications for scientific exhibits are still being accepted from Oklahoma doctors and organizations. Applications may be obtained by writing Mr. Jack Spears, Convention Manager, Oklahoma State Medical Association, B9 Medical Arts Building, Tulsa, Oklahoma.

All events of the 1957 Annual Meeting are being held in The Mayo Hotel of Tulsa. Commercial exhibits will be divided between the 16th Floor and a special Lobby Area closed to the general public. Scientific exhibits will be in the Ivory Room on the Mezzanine. Daily motion picture showings are scheduled in the Terrace Room, and roundtable luncheons, at which convention visitors may discuss problems with guest speakers, are being held on Monday and Tuesday, May 6th and 7th.

Social events will include:

1. The President's Inaugural Dinner

Dance on Tuesday, May 7th, featuring a social hour, program and dancing.

2. A complimentary shore dinner tendered by the Blue Cross-Blue Shield Plans of Oklahoma on Monday, May 6th. Guests are promised "all the oysters, shrimp and lobster they can eat."

3. The Annual Oklahoma State Medical Association Golf Tournament sponsored by the Pfizer Laboratories on Wednesday afternoon and evening, May 8th, at Tulsa Country Club. Doctors should bring their own equipment. Golfing and dinner will be complimentary.

A ten year reunion of the Class of '47 of the University of Oklahoma School of Medicine is planned as one event of the Annual Meeting. Special tables will be reserved at the dinner dance. Doctors Donald L. Brawnner, W. A. Waters, Thomas H. Fair, and Donald G. Clements of Tulsa are in charge of arrangements.

Hotel reservations should be made at the earliest possible date by writing the Hotels Committee, Tulsa County Medical Society, B9 Medical Arts Building, Tulsa. Do not write hotels directly. Please state type of accommodations desired, dates of arrival and departure, and choice of hotels. Most convention visitors will be quartered in the headquarters hotel, The Mayo. Late requests for accommodations may necessitate the use of Tulsa's other large and attractive hotels as a record attendance is anticipated.

A. M. A. Holds Meeting On Problems of V. A.

The Council on Medical Service of the American Medical Association met January 26, 1957, in Chicago to discuss the resolutions adopted at the mid-winter meeting in Seattle.

The Council discussion covered all phases of the Veterans Administration program including remedial legislation as well as internship, residency programs and other related matters.

Representing the Oklahoma State Medical Association was James C. Amspacher, M.D., of Oklahoma City. Doctor Amspacher is the chairman of the Oklahoma County Veterans Affairs Committee.



Northwest Oklahoma Medical Center Is Completed

Nearly a year ago, a group of Enid physicians began informal discussions concerning the possibility of building a medical center which would include as many of the specialties as possible, in addition to general practice representation.

This large and complete center was not to be organized as a clinic; each doctor would continue to practice individually as he had always done. The group believed that a center of this kind would facilitate more and better medical care for their patients.

The talking stage did not last long. It was soon apparent that a very representative group was indeed interested in seeing such a medical center become a reality. One of Enid's leading real estate men also became interested in the project and offered to assist the group composed of fifteen physicians, an oral surgeon and a pharmacist in carrying out its plans.

A site was selected on the south edge of Enid on Highway 81 because of its convenient location and the fact that it would provide ample parking space for 400 cars.

Within ten short months, the Center was a reality. Considering its size and the problems associated with a group project, the Northwest Oklahoma Medical Center was completed in record time.

The Center which is pictured here consists of five separate buildings constructed of white brick; each houses three or four doctors. Every office has its own separate heating and cooling facilities.

The interior of each office was designed and decorated to the occupant's own taste. Walnut or mahogany panelling is featured in each office, with individual preference also dictating the choice of colors in walls and floor covering.

An overhanging steel canopy was built over the concrete walkways which connect the buildings and the parking lots. The land surrounding the parking lots and buildings is appropriately landscaped.

Featured near the main entrance is a large caduceus backed by a twenty foot pylon of granite. At night it presents an especially imposing sight when lighted by several flood lights.

The doctors who occupy the Northwest Oklahoma Medical Center are: E. A. Abernethy, M.D., Oral Surgeon; W. J. Buvinger, M.D., Ear, Nose and Throat; A. F. Dougan, M.D., Ophthalmology; Robert Herlihy, M.D., Urologist; Bruce Hinson, M.D., Surgeon; Robert Shuttee, M.D., Pediatrics; John W. Williams, M.D., and Pat Shanks, M.D., Obstetrics and Gynecology; John McIntyee, M.D., and Robert Terrill, M.D., Internal Medicine; B. J. Cordonnier, M.D., Lester Kirby, M.D., and Evans Talley, M.D., General Practice and Surgery.

In addition, Henry Russell, M.D., and John Dunkel, M.D., Pathologists, provide a completely equipped medical laboratory. Leland Shyrock, M.D., and Hugh Mathews, M.D., have a well equipped radiological plant for diagnosis and therapy. Walter Scheffe has provided a complete prescription service.

Deaths

ALBERT W. WALLACE, M.D.
1901-1956

Albert W. Wallace, M.D., 55, died at his home in Tulsa December 25 from a cerebral hemorrhage.

Doctor Wallace had been a member of the Springer Clinic staff since moving to Tulsa ten years ago. He recently was installed as president of the Tulsa Internist's Society and was Secretary-Treasurer of the Oklahoma Diabetes Association.

His professional membership included the Tulsa County Medical Society, American College of Physicians, Oklahoma State Medical Association, and the American Medical Association. He was also a member of the All Souls Unitarian Church.

Doctor Wallace was born in Cleveland, Ohio, where he was graduated from Lakewood High School. He received his bachelor and medical degrees from Western Reserve University at Cleveland and took his internship at St. Luke's Hospital there.

He practiced at Watkins Glen, New York, and Miami Beach, Florida, before entering the Army Medical Corps during World War II. After being discharged from service Doctor Wallace located in Tulsa.

WILLIAM MERRITT TAYLOR, M.D.
1872-1957

William Merritt Taylor, M.D., retired Oklahoma City pediatrician, died on January 3, 1957, at the age of 85.

Doctor Taylor graduated from the University of New York, Bellevue Hospital Medical College, in 1898. He served his internship in the Willard Parker Hospital, New York City, New York, and an 18 months residency with the New York Infant Asylum. Doctor Taylor was a professor of pediatrics at the University of Oklahoma Medical School. He retired from practice in 1948.

Doctor Taylor was a member of the American Academy of Pediatrics, Oklahoma County Medical Society, a life member of the Oklahoma State Medical Association, and the "Fifty Year Club."

SILAS MURRAY, M.D.
1882-1957

Silas Murray, M.D., 75, retired Tulsa obstetrician died January 12, 1957, at his home.

A native of LaFollette, Tennessee, he graduated from the University of Tennessee Medical School at Nashville in 1907. He interned at Patterson General Hospital, Patterson, New York, and came to Tulsa in 1917 from Bellevue Hospital, New York, where he was on the staff.

Doctor Murray was a member of the Tulsa County Medical Society, the Oklahoma State Medical Association, and the American Medical Association. He belonged to the Baptist church.

COYNE H. CAMPBELL, M.D.
1904-1957

Coyne H. Campbell, M.D., died January 23, 1957, at the age of 52.

Doctor Campbell was one of the most widely-known psychiatrists and neurologists in the Southwest. He was the founder of the 100-bed psychiatric hospital, Coyne Campbell Sanitarium in Oklahoma City.

At the time of his death he was also professor of psychiatry and neurology at the University of Oklahoma's medical school. He had been a member of the medical school's faculty since 1933, serving as chairman of the psychiatry department from 1948 until 1954.

In 1950 Doctor Campbell made a gift of his hospital to Oklahoma Medical Research Foundation. However, he had continued to operate it under his name on a non-salaried basis.

Doctor Campbell was born in Davidson and was graduated from University of Oklahoma in 1924. Later he attended University of Chicago and Rush Medical college from which he graduated in 1928. He served his internship at St. Mary of Nazareth hospital in Chicago and later completed post graduate work at Chicago's Institute of Psychoanalysis.

He began his practice in Oklahoma City

in March, 1933. He established a psychiatric sanitarium in 1939.

He was a member of numerous professional societies: Phi Beta Kappa; Alpha Omega Alpha, honorary medical fraternity; and Sigma Xi, honorary scientific fraternity. He was also a member of the Oklahoma County Medical Society, the Oklahoma State Medical Association, and the American Medical Association.

VIRGIL V. BUTLER, M.D.
1883-1957

Virgil V. Butler, M.D., 73, died in Picher on January 2 after an extended illness.

Doctor Butler was born January 30, 1883, at Greenwood, Arkansas and graduated from the University of Arkansas in 1914. He had practiced medicine in Picher the past 33 years.

He was a member of the Ottawa-Craig County Medical Society, Oklahoma State Medical Association and the American Medical Association. Doctor Butler also belonged to the Masonic Lodge at Huntington, Arkansas, and was a member of the First Baptist church of Picher.

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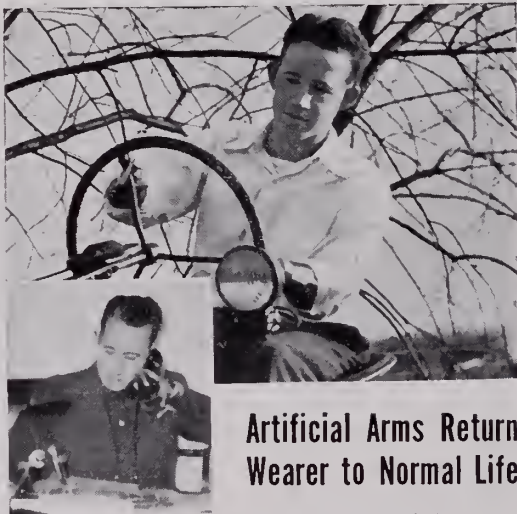
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Committee on Cancer Has New Regional Organization

The Committee on Cancer of the American College of Surgeons has established a regional organization to assist in furthering the objectives of the College in the field of cancer control.

The new field organization is composed of 12 U. S. and two Canadian sections. Each is headed by a chief who is a member of the Committee on Cancer. Membership on the Committee is composed of Fellows of the College who have made major contributions in this field over the years.

Oklahoma is in the 7th section along with Kansas, Missouri, and Arkansas. Howard E. Snyder, M.D., Winfield, Kansas, is the section chief.

History — Authority — Objectives

The present Committee on Cancer was authorized by the Board of Regents of the American College of Surgeons in 1939. Both the Committee and its field organization operate under the authority granted by the Board.

The objectives of the Committee on Cancer which the section chiefs will endeavor to promote are:

1. To develop, improve and further the educational programs of the College in the field of Cancer;
2. To develop professional standards for cancer programs;
3. To assure the most effective management of cancer patients;
4. To advise the profession and the public of the cancer clinical activities approved by the College;
5. And to advise with and support other national agencies in educational programs on cancer control.

Because the section chief will be well informed on the local activities in his area, the Committee feels that he will be in a better position to incorporate the program insofar as possible in the programs of other organizations.

Duties and Qualifications of Section Chiefs

The duties of the section chief are to represent the Committee in his section and to have general knowledge of the College ap-

proved cancer programs within his section and to serve as advisor to the Committee in this regard. He should have broad general knowledge of the cancer control activities in the states within his section.

Section chiefs may request the appointment of deputies in one or more of the several states within their jurisdiction. The section chief is authorized to form a section committee when his deputies number in excess of two, after approval by the Chairman of the Committee on Cancer.

The section chiefs shall be concerned with the implementation of policies and programs as promulgated from the Committee on Cancer and to foster such local sectional meetings and projects as are deemed appropriate by the Committee.

Activities

The activities with the various sections will vary greatly depending upon local needs. It is recognized that in most states and provinces good programs of cancer control have been established by the state and provincial medical societies and that the Committee on Cancer of the A.C. of S. shall cooperate in the development of these programs. In these areas sectional committee members need only report to the section chiefs and Committee of the successful activities in their area.

However, in areas where such programs have not been developed or are inadequately developed, the sectional committee may initiate and lead in the development of a program.

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OU Medical School Alumni Hold Annual Dinner Meeting

About 175 members of the Oklahoma University Medical School Alumni Association, their wives and guests attended the 1956 annual banquet held October 26 in the Skirvin Tower Hotel, Oklahoma City.

The evening included an informal social hour, dinner, and musical entertainment by the Surrey Singers from Oklahoma City University.

Highlighting the short business meeting was the installation of new officers. Doctor Wendell Smith of Tulsa took over the presidency from retiring Dr. Claude E. Lively of McAlester. Other officers who will serve with Doctor Smith until next October are Doctor A. B. Smith of Stillwater, president-elect; Doctor Carl Baily of Stroud, vice president; Doctor John R. Taylor, of Kingfisher, secretary; and Doctor Ned Burleson of Prague, treasurer.

Guests of the Association for the evening were: President and Mrs. George L. Cross; Doctor and Mrs. Mark R. Everett; Doctor and Mrs. Leonard P. Eliel, Director of Research at the Oklahoma Medical Research Foundation; and Doctor Harold W. Elley, Chairman of the Research Committee of the National Association for Mental Health.

Merlin K. Duval, M. D., Appointed Associate Professor of Surgery

The Regents of the University of Oklahoma appointed Merlin K. DuVal as fulltime Associate Professor of Surgery at the University of Oklahoma Medical School effective January 1, 1957.

A graduate of Dartmouth and Cornell, Doctor DuVal secured his postgraduate training at New York Hospital, Roosevelt Hospital (New York City) and the V. A. Hospital at Kingsbridge Road (Bronx). In July, 1956, he was awarded a five-year Markle Foundation scholarship.

During the past two years, Doctor DuVal has worked with Clarence Dennis, M.D., at the State University of New York School of Medicine (Brooklyn). His research projects are in the areas of (1) chronic pancreatitis, (2) studies of the pancreatic ductal system and (3) biliary tree physiology.

Tulsa County Medical Society Celebrates Its 50th Year

The Tulsa County Medical Society celebrated its 50th Anniversary Friday, January 18, with a dinner dance at the Mayo Hotel, Tulsa.

G. R. Russell, M.D., President of the Tulsa County Medical Society, greeted members and introduced guests. H. M. McClure, M.D., President of the Oklahoma State Medical Association, extended greetings from the O.S.M.A.

Guest speaker, W. Randolph Lovelace II, M.D., Albuquerque, New Mexico, was introduced by Tulsa County Medical Society Secretary-Treasurer Walter E. Brown, M.D. Doctor Lovelace spoke on the topic, "Present and Future Medical Research, Including the Use of Atomic Energy."

Following the after-dinner program the members and their guests enjoyed dancing to the music of Honey Hudgen and her orchestra.

William S. Jacobs, M.D., Named President of County Heart Assn.

William S. Jacobs, M.D., was installed as 1957 president of the Tulsa County Heart Association at its annual meeting in Tulsa on January 9, 1957.

An open house to which the public was invited began at 7 p.m. Exhibits at the open house included the Heart of the Home kitchen, displays of medical equipment used in diagnosis and heart surgery.

Dave Johnson, president of the Oklahoma Heart Association was guest speaker at the meeting. C. S. Lewis, M.D., was the outgoing president of the Tulsa County Heart Association.

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For full information write to Miss Carmack, Supervisor, Medical Recruiting, Box A, State Personnel Board, 801 Capitol Avenue, Sacramento, California.

25 Years Ago . .



Articles published in *The Journal* of the Oklahoma State Medical Association February 1932. Edited by John G. Matt, M.D.

THE NERVOUS MOTHER AND HER BABY

Carroll M. Pounders, M.D., F.A.C.P.

SCURVY IN CHILDREN

C. W. Arrendell, M.D.

CONGENITAL NEUROSYPHILIS WITH MANY CONVULSIONS

T. H. McCarley, M.D., F.A.C.P.

DIAGNOSIS OF ENLARGED THYMUS

Fannie Lou Brittain, M.D.

A REPORT OF SIX HUNDRED AND FOUR CASES OF ACUTE APPENDICITIS

J. L. Walker, M.D., M.Sc.

APPENDICITIS AND ITS MORTALITY*

Horton E. Hughes, M.D.

APPENDICITIS AND THE PUBLIC

Marvin E. Stout, M.D.

CHRONIC PANCREATITIS

Lea A. Riley, Prof. Clinical Med., Okla. Univ. School of Med.

DIGESTIVE DISORDERS DUE TO LESIONS OF THE STOMACH AND DUODENUM

Arthur W. White, A.M., M.D., F.A.C.P.

*Excerpt follows

APPENDICITIS AND ITS MORTALITY

"So much has been said about appendicitis, in general, that to speak further of it, one risks making himself a bore. But the fact remains that there are over five hundred thousand cases of appendicitis in the United States and Canada annually, of which twenty-five thousand die, making a mortality of five per cent which is as great as the combined mortality of gall stones, ectopic pregnancies, pyosalpinx and diseases of the pancreas, spleen and thyroid, and almost equal to the combined mortality of gastric and duodenal ulcers, intestinal obstruction and gall stones.

"Such a mortality is appalling, especially so since most of it is due to negligence, more often on the part of the patient or patient's family, and occasionally due to negligence on the part of the attending physician. The physician's negligence being due, not so often to a mistaken diagnosis, as to the 'take a chance' attitude, or in not insisting emphatically enough on immediate hospitalization and early operation. The administration of morphine and cathartics in any type of appendicitis certainly accounts for a large share of the five per cent mortality which that disease carries.

"In our own immediate locality the mortality of

appendicitis compares favorably with that of the rest of the United States. Since December 1, 1927, there has been four thousand two hundred seventy-five surgical cases which were operated on, in either of the two Shawnee Hospitals. The general mortality of all operations over that period was only 2.7 per cent which, I believe, is very good indeed. Of the four thousand two hundred seventy-five surgical cases, one thousand one hundred eighty-eight were operated on for appendicitis. The mortality was 4.1 per cent although still far too high, is below the general United States average. Analyzing still further the mortality of the one thousand one hundred eighty-eight appendicitis cases, one finds that one hundred and eighty-three of these cases were classified as ruptured appendix, on admission to the hospitals, and that the mortality of the one hundred eighty-three cases was twenty-six per cent, while the mortality of the one thousand five unruptured appendix cases was less than .3 per cent.

"Probably a still further analysis of the one hundred eighty-three ruptured cases would show that a certain percentage had localized abscesses, and a certain percentage had a generalized peritonitis, and that the higher mortality was to a certain extent confined to those patients having a generalized peritonitis.

"It is obvious that the ideal way to reduce the number of ruptured appendix cases and thereby reduce the mortality of appendicitis in general is to educate the people as to the dangers of the administration of cathartics, and delay in calling the doctor when an individual has pain in the abdomen. However, such education is slow and hampered by the ethics and lethargy of the profession, and the cults and quacks, omni-present who capitalize every time the medical profession breaks into print, or comes before the public mind. In spite of this, education of the public must still be the goal. But in the mean time, perhaps the mortality may still be lowered by a little more conservative treatment of those patients who come to us with the symptoms and physical findings of a generalized peritonitis.

"I believe that the consensus of opinion of the surgical teachers in the United States is that to operate on a patient with the history and physical findings of a generalized peritonitis of many hours standing, to establish drainage or what, only serves to break down the patient's already decreased resistance, and to hasten his exitus, and that it is far better to treat such a patient conservatively by giving him enough morphine to keep the bowels and body absolutely quiet. To administer large amounts of salt solution and glucose intravenously and sub-cutaneously with nothing by mouth, and to wait several days or a week to allow the peritonitis to wall off the infection into a localized abscess, which may then be drained with comparative safety. Those patients who die under conservative treatment would most surely die under a more radical treatment.

"In conclusion, I feel that I must make myself clear—that I believe that all cases of localized peritonitis with walled off abscess, should be operated on, and can and should be effectively drained. However, in the acute, diffuse or generalized peritonitis, I believe

that operation should be deferred until a time when the body's own protective mechanism can wall off and localize the infection into an abscess and then it should be operated on and drained, usually leaving the appendix to be removed at a later date, unless it is unusually free and accessible to removal."

EDITORIAL NOTES—PERSONAL AND GENERAL

MURRAY COUNTY MEDICAL SOCIETY elected Doctor O. W. Sprouse, president; Doctor P. V. Anna-down, secretary-treasurer, both of Sulphur, for 1932.

PONTOTOC COUNTY MEDICAL SOCIETY elected the following officers for 1932: Doctors, O. H. Miller, president; C. F. Needham, vice-president; Alfred R. Sugg, secretary-treasurer; E. A. Canada, censor; all of Ada.

OKMULGEE COUNTY MEDICAL SOCIETY elected the following officers for 1932: Doctors, T. C. Carloss, Morris, president; G. A. Kilpatrick, Henryetta, vice-president; M. D. Glismann, Okmulgee, secretary-treasurer; N. N. Simpson, Henryetta, censor.

WASHINGTON COUNTY MEDICAL SOCIETY elected the following officers for 1932: Doctors, J. P. Vansant, Dewey, president; S. G. Weber, Bartlesville, vice-president; J. V. Athey, Bartlesville, secretary; E. E. Beechwood, Bartlesville, treasurer; Doctors H. G. Crawford and J. V. Athey, delegates; Doctors G. V. Dorsheimer, Dewey; J. G. Smith, Bartlesville, alternates.

KAY COUNTY MEDICAL SOCIETY met in January and elected the following officers for 1932: Doctors, R. B. Gibson, Ponca City, president; L. H. Becker, Blackwell, vice-president; L. G. Neal, Ponca City, secretary-treasurer; Dewey Mathews, Tonkawa, censor.

THE EXAMINATION OF THE UROLOGIC PATIENT

ALFRED R. SUGG, M.D., Ada

"This dissertation and the suggestions outlined are not intended as a *'sine qua non'* of urologic examination. It would not fit a large clinic of super specialists. It is with some temerity that I present it at all, seeing that there are some experienced urologists here, and if to these my remarks are trite, I can only add that I am especially speaking to my neighbors in the small towns of southern Oklahoma, who are confronted daily with the very practical section of the medical art . . .

1. I believe the most important single factor in successful examination is system. A place for everything and everything in its place. Work out a satisfactory routine and adhere to it until it becomes automatic. Even the average plowboy is more systematic than the average physician. He does lay off his land, and whittles away at it until it is done and when he is through he knows he is through and that no land has been plowed twice. I once owned a small dog that would hunt vigorously, dashing hither and yon, and would return presently with his tongue out and wearing a facial expression that said plainly, 'I am about the best hunter yet.' His only trouble was that

he never found anything, and I'm sure the reason was because he apparently never knew what he was hunting, *i.e.*, did not make a systematic search. The memory of that pup reminds me of the most of us as physicians. In our hurry to impress the patient with our superior wisdom, or in a rush to get into the golf knickers, we begin running in a circle and all too often we return with our tongues out (wagging alibis) and wondering where the patient went . . .

"Another detail (or little thing) of great importance that is frequently overlooked is the careful cleansing of the urethra before any instrumentation, as well of course as to really sterilize all instruments. Those that cannot be boiled can be satisfactorily treated with 1:1000 oxymercure of mercury.

"I think the chill following instrumentation is more often due to the infection than to the trauma . . .

"The sight of blood in any amount in any urological examination ought to be the 'red flag in the bull's face,' challenging us not to even hesitate until its source is accurately determined. Pus cells are of but slightly less importance and I mention these here to emphasize the importance of following up a clue once it has been found. The corollary of this is to check your findings and as Andy would say, 'double check.' . . .

"We hear rumblings of a more or less constant warfare between the ureteral stricture school and those of the anti-stricture party. Much confusion would cease to exist if the proponents would 'double check' their findings more closely. No doubt many spastic contractions of the ureter with apparent dilatation above have been mis-called inflammatory strictures, but if on one or two or three subsequent examinations the ureterogram is identical I feel safe in assuming it is not a coincidence and that stricture is the diagnosis. I think it is axiomatic that no man should attempt to diagnose disease so freighted with possibilities of danger who is not proficient not only in the use of the common tools of the profession, but also he must possess and be fairly adept with the special instruments the use of which has brought our branch of medicine to become a specialty . . .

"An old master when asked the difference between a good physician and a poor one replied that the good one made rectal examinations. For the purpose of urological examination the rectal route is especially valuable, and should be done on every patient. The tonus of the sphincter muscle alone speaks volumes when a tabetic bladder (e.g.) is being dealt with, and due to the intimate interconnection of the nerve supply, a spastic sphincter would suggest further study of the bladder. We are all quite familiar with the rectal examination of the prostate, however, I have been amused to observe five or six urologists examine the same patient at the same time and give a detailed description of their findings. Their failures to coincide only emphasizes the necessity for a detailed and careful examination of every feature of the gland . . .

"Some diseases of the G. U. tract are in the present state of our limited knowledge undiagnosable. Many such are time consuming and tedious, but the majority of them can be properly diagnosed provided we proceed in a systematic way. Get the facts, cor-

relate and interpret them properly. While lack of training and poor judgment based on non critical experience are continually to be reckoned with I believe that simple and inexcusable laziness is the chief hindrance in the field of urological examination today."

Editorial Notes—Personal and General


Dr. and Mrs. R. L. Murdoch, Oklahoma City, announce the birth of a baby boy February 22, 1932.

Ottawa County Medical Society met at Picher, February 12th. Dr. D. L. Connell was toastmaster. A short business session preceded a chicken dinner. Nearly all towns of Ottawa County were represented and a Missouri physician was a guest.

Creek County Medical Society met in Drumright, February 25th. Dr. O. W. Starr, Drumright, presented a paper on "Case of Carcinoma of Stomach;" Dr. W. J. Neil, Drumright, discussed the present status of the County Health Office; Dr. R. Q. Atchley, Tulsa, presented a paper on "Treatment of Fractures by the Skeletal Traction Method." A banquet followed the reading of the papers.

Muskogee County Medical Society and the Muskogee County Dental Society met in joint session at the Town and Country Club, Muskogee, on February 17th. Banquet followed by a very interesting scientific program. Three dental papers prepared by Drs. A. E. Bonnell, Otto L. Hine, and G. L. Dodson; three medical papers by Drs. E. H. Fite, J. Hutchins White, and Charles E. White. Some fifty-five present. At this meeting plans were made to hold bi-annual joint meetings of the two societies.


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Letter to The Editor . . .

To The Editor
The Journal of the Oklahoma State
Medical Association

Dear Sir:

It is the desire of the Oklahoma Chiropractic Association that the members of your profession know more about us in hopes that with better understanding better liaison will ensue.

Our training and our interest gives us something to offer people which they badly need. Your profession goes from the general to the specific in that your specialists must be generalists first. The dentist and the chiropractor are specialists first and become generalists only when the mouth or foot reflects evidence of systemic disease. Your way is undoubtedly better, but since the medical profession has never developed a group especially interested in the foot, if our people went to medical school first the foot would still be a poorly understood and neglected area. Although we in chiropractic recognize many systemic disturbances from alterations in the function, structure and circulation of the foot we feel better when our patients have been under the care of a competent physician.

Chiropractic is a science dealing exclusively with the care of the human foot in health and disease. The degree, Doctor of Surgical Chiropractic, is conferred upon applicants satisfactorily completing a four-year course in one of six accredited colleges of chiropractic in the United States.

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Chicago College of Chiropractic, Chicago,
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Illinois College of Chiropractic and Foot
Surgery, Chicago, Illinois

New York College of Podiatry, New
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Ohio College of Chiropractic, Cleveland,
Ohio

Temple University, School of Chiropractic,
Philadelphia, Pa.

A minimum of one year's work in an ac-

credited college, university or junior college precedes the course.

In Oklahoma, following graduation, the chiropractor must pass the State Board Examination and is required to meet rigid standards before he is allowed to practice. He must then serve an internship of ninety days minimum not more than three hundred sixty-five days in an Oklahoma practitioner's office, or in an accredited college clinic. He subscribes to a high code of ethics patterned after that of the medical profession. In fact Oklahoma's ethical practice act has become a model in many other states.

It is our desire and ultimate aim to be accepted as part of the medical team. We are prepared to fill a real need in the care of the human foot. Our progress has been faster in some areas than in others. We were recognized by the American Medical Association in 1939 as an "Ancillary hand-aided to medical practice in a limited field considered not important enough for a doctor of medicine to attend and, therefore, too often neglected."¹ The A.M.A. Judicial Council stated that chiropractic adequately filled a gap left unfilled by the A.M.A. In answer to a question by the state insurance commissioner, the attorney general for Oklahoma in 1952 stated that chiropractors are "for all practical purposes, in a position of a physician in the orthodox field of medicine,"² although limited to foot disorders.

The profession of chiropractic has been qualified in a limited capacity and under a member of the surgical staff for work in hospitals by the Joint Commission on Accreditation of Hospitals. Kenneth B. Babcock, M.D., director of the Commission, said. "The Joint Committee welcomes the presence of qualified doctors of surgical chiropractic on the staffs of hospitals—"³ Chiropractors serve on the staffs of 40 hospitals in New York City alone, and of about 1,000 in the United States.

There are areas in the field of medicine in which our services can be particularly helpful: the feet and shoes of the diabetic, the feet, the shoes and the balance of the pregnant woman and the feet of old people,

(Continued on Page 96)

PHYSICIAN PLACEMENT

Anesthesia

Daniel B. Perry, Residence Quarters, Harlem Hospital, New York, N. Y., age 48, Meharry Medical College, 1948, interned at Harlem Hospital, New York and served residency in anesthesia there, veteran, available December, 1957.

General Practice

Louis Marshall Cuvillier, Jr., 1407 Woodside Parkway, Silver Spring, Maryland, age 44, married, George Washington University School of Medicine, 1938, interned at Garfield Memorial Hospital, Washington, D.C., one year residency in medicine and obstetrics at Norfolk General Hospital, Norfolk, Virginia. Veteran, available upon 90 day notice.

Orby L. Butcher, Jr., 3106 Alaska, Dallas, Texas, age 29, University of Oklahoma, 1955, now in surgical residency at VA Hospital in Dallas, Veteran. Available, July, 1957. Married.

David L. Mossman, USAH, Orthopedic Department, Ft. Riley, Kansas, age 28, University of Vermont, 1954, available upon separation from service, December, 1957. Married.

Robert R. Rupp, 1235 N. Lorraine, Wichita, Kansas, age 30, married, University of Oklahoma, 1956, internship at Wesley Hospital, Wichita, veteran, available, July 1, 1957.

Internal Medicine

James E. Morris, Jr., 1034 Second St., S.E., Moultrie, Georgia, age 26, University of Tennessee College of Medicine, 1953, one year internal medicine residency, now serving military obligation, available February, 1957. Married.

Robert W. Datesman, 94 Oak Street, Westwood, Massachusetts, age 30, University of Pennsylvania, 1951, residency training at University of Minnesota Hospitals, and Boston Veteran Hospital, Veteran, available in July, 1957. Married.

Obstetrics-Gynecology

John P. Harrod, Jr., 932 E. 56th Street, Chicago 37, Illinois, age 33, University of Georgia, 1946, served residency at University Hospital, Augusta, Ga., Duval County Hospital, Jacksonville, Florida and at Chicago Lyons-In Hospital, Board certified, veteran, availability date unknown. Married.

Bernard Martin Davis, Jr., 101 Turnbridge Rd., Baltimore 12, Maryland, age 31, married, Georgetown University, 1951, 3 years residency at University Hospital, Baltimore, veteran, available, July 1, 1957.

Pathology

Jess D. Green, Jr., 1765 South Victor, Tulsa, age 32, George Washington University, 1950, will finish four years pathology residency in January, 1957. Married.

Pediatrics

David Goldstein, 66 Lafayette Ave., Staten Island 1, N. Y., age 38, Long Island College of Medicine,

1949, two years residency in pediatrics, Board certified, available after October 1, 1956. Single.

Robert W. Mosely, 211 Adams Street, Galax, Virginia, age 32, married, Medical College of Virginia, 1948, residency at Walter Reed Army Hospital, Board eligible, interested in private practice or public health, veteran, available April, 1957.

Surgery

James F. Alexander, Charity Hospital, New Orleans, Louisiana, age 34, single, Ohio State, 1949, residencies at North Little Rock VA Hospital and Charity Hospital, veteran, available immediately.

Duane A. Barnett, 1636 N.E. 46th Street, Oklahoma City, age 30, University of Oklahoma, 1952, interned at Wesley Hospital, Oklahoma City, now in residency at Veteran's Administration Hospital, veteran, will be board eligible and available for practice July 1, 1957. Married.

Vernon L. Guynn, 2026 S. Second Ave., Maywood, Ill., age 32, University of Illinois, 1947, passed Part I of General Surgery Board, military obligation served, available January 1, 1957. Married.

Alvin S. Natanson, 49 Kiernan Drive, Rantoul, Illinois, age 36, Tufts Medical College, 1949, residency training at Boston City Hospital, Diplomate of the American Board of Surgery, available upon separation from service, July, 1957. Married.

Urology

John C. Brazos, 406 South Washington, Watertown, Wisconsin, age 36. University of Illinois, 1949, interned at Anckee County Hospital, St. Paul, Minnesota, residency at Milwaukee County Hospital, Milwaukee, Wisconsin. Veteran, available upon completion of residency, July 31, 1957. Married.

Paul Lucian Livingston, 18340 Lake Chabot Road, Castro Valley, California, age 35, New York Medical College, 1946, served residencies at Orange Memorial Hospital, New Jersey and at Veterans' Administration Hospital, Long Beach, California, now Assistant Chief Urologist at V.A. Hospital, Board Qualified, veteran, available upon sixty days notice. Married.

CLASSIFIED ADS

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ELECTROCARDIOGRAPH FOR SALE: Recent model, Beck-Lee "Cardial," Reasonable, J. W. Coin, M.D., 837 N.E. 15th, Oklahoma City, Okla., Phone FO 5-9211.

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COMING MEETINGS

THE 24th ANNUAL WASHINGTON'S BIRTHDAY CLINIC

The Biltmore Hotel, Oklahoma City, Okla.
February 22, 1957

W. W. Rucks, M.D., Presiding

10:00 a.m. *The Porphyrrias*—William R. Paschal, M.D.

10:30 a.m. *Magnesium Metabolism*—W. O. Smith, M.D.

11:00 a.m. *Basis of Chemotherapy in Malignant Disease*—L. P. Eliel, M.D.

11:30 a.m. *Highest Integrative Function in Man After Loss of Known Cerebral Hemisphere Tissue*—Harold G. Wolff, M.D.

George Barry, M.D., Presiding

1:30 p.m. *Newer Insulins and Hypoglycemic Agents*—Bert F. Keltz, M.D.

2:30 p.m. *Chemotherapy of Tuberculosis*—Charles M. Harvey, M.D.

3:00 p.m. *Individualized Management of Peripheral Vascular Occlusive Disease*—Edward R. Munnell, M.D.

3:30 p.m. *Clinical Pathological Conferences*—William T. Snoddy, M.D. and Robert H. Bayley, M.D.

THE UNIVERSITY OF TEXAS POSTGRADUATE SCHOOL OF MEDICINE TEXAS MEDICAL CENTER

HOUSTON, TEXAS

RHEUMATIC DISEASES

February 27 and 28 and March 1, 1957

GENERAL INFORMATION

Tuition Fee: \$40.00

Credit Hours: 25

This course will be held in the Auditorium of The University of Texas M. D. Anderson Hospital and Tumor Institute in the Texas Medical Center.

It is being presented in order to make available in a post-graduate course the authoritative, experienced views of prominent clinicians on the subject of rheumatic diseases (those conditions in which pain and stiffness of some portion of the musculo-skeletal system are prominent).

FACULTY

GUEST LECTURERS

Bunim, Joseph, M.D., National Institute for Arthritis and Metabolic Diseases, U.S. Public Health Service, Bethesda, Maryland.

Freyberg, Richard H., M.D., Associate Professor of Clinical Medicine, Cornell Medical College,

Specialist in Rheumatic Diseases, New York City, New York.

Holbrook, William P., M.D., Senior Consultant in Medicine, St. Mary's Hospital and Sanatorium, Tucson, Arizona.

LOCAL SPEAKERS

Collins, Lois C., M.D., Clin. Assoc. Prof. of Radiology (T) (B)

Donovan, Michael M., M.D., Clin. Asst. Prof. of Orthopedic Surgery (B)

Doubleday, Leonard, M.D., Asst. Prof. of Radiology (B)

Hofer, Jesse W., M.D., Clin. Asst. Prof. of Medicine (T) (B)

Leavitt, Lewis A., M.D., Clin. Asst. Prof. of Physical Medicine and Rehabilitation (B)

Levy, Moise D., Jr., M.D., Clin. Asst. Prof. of Medicine (T) (B)

MacIntyre, Robert S., M.D.

Spurr, Charles L., M.D., Clin. Assoc. Prof. of Medicine (B)

Thomas, John R., M.D., Asst. Prof. of Pathology (B)

(T) denotes faculty of The University of Texas Postgraduate School of Medicine.

(B) denotes faculty of the Baylor University College of Medicine.

UNIVERSITY OF OKLAHOMA SCHOOL OF MEDICINE

POSTGRADUATE COURSES—1956-1957

SHORT COURSE SERIES

3:30 to 8:30 p.m., Room 118, Medical School Afternoon and Evening Sessions

HEART DISEASE IN CHILDREN

3:30 p.m.—CONGENITAL HEART DISEASE

Clinical Features.....Henry B. Streng, M.D.

Radiography.....Simon Dolin, M.D.

Electrocardiography.....L. L. Conrad, M.D.

Surgical Approach.....Allen E. Greer, M.D.

5:30 p.m.—Dinner, Hospital Cafeteria

6:30 p.m.—RHEUMATIC FEVER AND RHEUMATIC HEART DISEASE

Clinical Feature and Therapy

of Acute Phase.....Ben Nicholson, M.D.

Relationship to Streptococci

Prophylaxis.....Thomas Haight, M.D.

Electrocardiography.....Robert H. Bayley, M.D.

Therapy of Chronic Rheumatic

Heart Disease.....L. L. Conrad, M.D.

Registration: \$3.50 includes dinner, Hospital Cafeteria
March 13—Anesthesiology for Part-Time Anesthetists

April 10—Problems in Infectious Disease

May 15—Chronic Pulmonary Disease

June 12—Surgical Emergencies

SELECTED PROBLEMS IN INTERNAL MEDICINE

November 26-30—Arranged by the American College of Physicians

ADVANCED ELECTROCARDIOGRAPHY

March 4-8—(Prerequisite, Doctor Bayley's Basic Electrocardiography Course)

OPHTHALMOLOGY-OTOLARYNGOLOGY SYMPOSIUM

March 7-8—Sponsored by Oklahoma City Society of Ophthalmology and Otolaryngology

Guest Lecturers:

Harold G. Scheie, M.D., Philadelphia, Pennsylvania

Henry L. Williams, M.D., Rochester, Minnesota

UROLOGY SYMPOSIUM

March 15—C. B. Taylor Memorial Lecture to be held with this meeting.

TRAUMA SYMPOSIUM

April 5-6—Sponsored by Regional Committee on Trauma of American College of Surgeons

Guest Lecturer:

Daniel C. Riordan, M.D., New Orleans, La.

OKLAHOMA ASSOCIATION OF HOUSE STAFF PHYSICIANS

May 31—Two Guest Lecturers and presentation of original papers by members of the various House Staffs will highlight this program.

POSTGRADUATE CONFERENCE

The Temple Division of the University of Texas Postgraduate School of Medicine offers the fifth Scott, Sherwood and Brindley Foundation Postgraduate Conference in Medicine and Surgery on March 4, 5, 6, 1957. For detailed information write: Director Scott, Sherwood and Brindley Foundation, Scott and White Clinic, Temple, Texas.

Physicians desiring to register for any of the courses listed above should register by writing the Office of Postgraduate Instruction, University of Oklahoma School of Medicine, 801 N.E. 13 Street, Oklahoma City.

NINTH ANNUAL INSTITUTE IN PSYCHIATRY AND NEUROLOGY

The Ninth Annual Institute in Psychiatry and Neurology will be held at the Veterans Administration Hospital, North Little Rock, Arkansas, on February 28 and March 1, 1957. Participants will include:

Francis J. Braceland, M.D., Institute of Living, Hartford, Connecticut, President, American Psychiatric Association.

Doctor Esther Lucille Brown, Director of University and Community Relationships, Boston University School of Nursing, Boston, Massachusetts.

Donald A. Covalt, M.D., New York University Bellevue Medical Center, New York, New York.

Iago Galdston, M.D., New York Academy of Medicine, New York, New York.

Doctor William E. Gordon, Professor of Research, George Warren Brown School of Social Work, Washington University, St. Louis, Missouri.

Doctor Lowell E. Kelley, Professor of Psychology, University of Michigan, Ann Arbor, Michigan.

Louis A. Krause, M.D., University of Maryland, School of Medicine, Baltimore, Maryland.

L. H. McDaniel, M.D., Tyrnza, Arkansas.

William S. Middleton, M.D., Chief Medical Director, Department of Medicine and Surgery, Veterans Administration, Washington, D.C.

Doctor Earl G. Planty, Professor of Management, University of Illinois, Urbana, Illinois.

Mr. Winthrop Rockefeller, Little Rock, Arkansas.

Lewis R. Wolberg, M.D., New York, New York.

Harold G. Wolff, M.D., The New York Hospital, New York, New York.

MODERATORS WILL INCLUDE

J. B. Bounds, M.D., Manager, Veterans Administration Hospital, Roanoke, Virginia.

Delmar Goode, M.D., Manager, Veterans Administration Hospital, Little Rock, Arkansas.

Granville L. Jones, M.D., Superintendent, Arkansas State Hospital, Little Rock, Arkansas.

William K. Jordan, M.D., University of Arkansas School of Medicine, Little Rock, Arkansas.

S. J. Muirhead, M.D., Manager, Veterans Hospital, Salisbury, North Carolina.

William G. Reese, M.D., University of Arkansas School of Medicine, Little Rock, Arkansas.

Terry C. Rodgers, M.D., Little Rock, Arkansas.

Lee G. Sewell, M.D., Manager Veterans Administration Hospital, Pittsburgh, Pennsylvania.

Doctor Braceland will present the principal address of the dinner session Thursday evening, February 28. On Wednesday, February 27, there will be work shops in clinical psychology, psychiatric social work, and psychiatric nursing.

Harold W. Sterling, M.D., Manager of the Hospital, cordially invites interested professional personnel to attend this institute, registration being without charge.

ARMY MEDICAL SERVICES SERIES

Army Medical Services will conduct courses in "Surgery in Acute Trauma," April 1-3, 1957, William Beaumont Army Hospital, Ft. Bliss, Texas.

May 6-8, 1957, Brooke Army Hospital, Brooke Army Medical Center, Ft. Sam Houston, Texas.

LETTER TO THE EDITOR

(Continued from Page 92)

about 40 per cent of whom are more or less disabled because of disturbances in them.

We would greatly appreciate a consideration by the physicians of Oklahoma of the help we may be able to give their patients who have foot complaints. We would further appreciate their consideration of any mailings they may get from us which will be for the purpose of clarifying our education, and our training and our experiences. Since for brevity's sake the quotations above were taken out of context I am appending a few references.

Sincerely yours,

WARREN D. LONG, D.S.C.


Secretary and Treasurer

Oklahoma State Board of Chiropractic

REFERENCES

1. Report of American Medical Association Judicial Council to its House of Delegates, 1939.
2. Report in Oklahoma City Times, March 31, 1952.
3. Babcock, Kenneth B., M.D.; Letter from Joint Commission on Accreditation of Hospitals, Sept. 1, 1954.


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ANNUAL CLINICAL CONFERENCE

CHICAGO MEDICAL SOCIETY

March 5, 6, 7 and 8, 1957

PALMER HOUSE, CHICAGO

Daily Half-Hour Lectures by Outstanding Teachers and Speakers on subjects of interest to both general practitioner and specialist.

Panels on Timely Topics

Daily Teaching Demonstrations

Medical Color Telecasts

Scientific Exhibits worthy of real study and helpful and time-saving Technical Exhibits

The Chicago Medical Society Annual Clinical Conference should be a **MUST** on the calendar of every physician. Plan now to attend and make your reservation at the Palmer House.

Book Review

CIBA FOUNDATION COLLOQUIA ON ENDOCRINOLOGY. VOLUME VIII: THE HUMAN ADRENAL CORTEX. Edited by G. E. W. Woestenholme. Little, Brown and Co., Boston, 1955.

This volume is the transaction of a panel gathered by The Ciba Foundation in London early in 1954 for the purpose of correlating the extensive recent literature on the adrenal cortex. It is noteworthy that the meeting marked the centennial of the pioneer investigations of Thomas Addison in the same city.

Within the 658 pages of the book are 35 formal presentations and considerable informal discussion among the 60 participants, yet excellent continuity has been maintained. The discussants are outstanding contributors to representative phases of the subject who have presented their data and expressed their opinions in a most worthwhile manner.

The first part of the volume is concerned with basic aspects of adrenal cortical histology, chemistry and physiology and the second part emphasizes clinical aspects of the subject.

There is considerable discussion of histological and histochemical changes in the adrenal gland following various stresses, particularly insofar as the significance of shifts in lipid patterns. The suprising enlargement of the zona glomerulosa of the adrenal cortex after chronic administration of cortisone is ascribed to the state of hypokalemic alkalosis provoked by cortisone and not to direct stimulation of the gland by the glucocorticoid. Hypertrophy of the zona fasciculata of the adrenal cortex in the inmates of German concentration camps is held to be due to the increased demands for glucocorticoids necessary to convert muscle protein into available carbohydrate. This finding is contrasted to the adrenal cortical atrophy seen in retreating Japanese soldiers who existed for long periods on sugar cane roots. Present status of the painstaking

work of elucidating the intermediary metabolism of the adrenal cortical steroids is summarized and discussed in a straightforward manner. Evidence is presented to support the view that the primary defect in the adrenogenital syndrome is the relative deficiency of a 21-hydroxylase in the adrenal cortex with resultant production of androgenic by-products. There is increased production of pituitary corticotropin to aid the crippled glucocorticoid production which further intensifies androgen production. The beneficial effect of glucocorticoid replacement in correcting this condition is described.

Aldosterone, the highly potent naturally occurring mineralocorticoid, receives its full share of attention though much of the work presented was hampered by the small amounts of the material available. Patients with Addisons' Disease treated with aldosterone in doses of 150-200 micrograms daily showed excellent response with rapid onset of effect, regression of skin pigmentation, orthostatic blood pressure regulation, normal salt and water conservation without edema and return of glucose tolerance.

Cushings Syndrome is covered in some detail. It was agreed that in those cases without adrenal tumor irradiation of the pituitary is therapeutically effective.

Experience with adrenalectomy and hypophysectomy in the human being is presented.

Changes in adrenocortical excretory patterns are described during combat stress as well as various other psychological situations.

The encyclopedic nature of this volume and the competence of its contributors qualifies it as a valuable compendium of a large tremendous toll of mental illness and to help part of the welter of data available on the adrenal cortex.—*Richard W. Payne, M.D.*

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and
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patient in
everyday practice*

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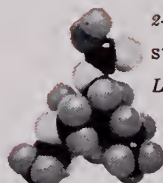
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THE MILTOWN MOLECULE

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The Polio Drive

The American Medical Association on January 26 called together representatives of the State Medical Associations to stimulate a drive in each state to get people vaccinated against polio. The necessity of this program stemmed from an obvious inertia in many places along the line that indicated that only a fraction of the people who should be immunized was taking advantage of the Salk vaccine.

The Council of the Oklahoma State Medical Association does not desire to arbitrarily limit the means but desires that each county society initiate its own program in whatever way it thinks would be best to accomplish the most effective vaccination drive in that county. There is a confidence in the ability of the county societies to do this that has permeated all the deliberations of the Council and the General Health committee. Such confidence speaks well for the sense of community responsibility that exists in each county society.

The program in each county, however, can only be effective if all members actively support it. It is the duty of every physician to immunize his patients against communicable disease when indicated. It is the duty of the community to prevent the development and spread of disease that might endanger the community or any of its members. How effective the Salk vaccine is in preventing intestinal infections is not known, but it is all we have.

For this drive to be effective each physician and each county society must consid-

er the community responsibility first and foremost. His own patients will be well served if their neighbors, friends, playmates, schoolmates, and associates of all kinds can be protected against polio.

Rehabilitation and the Physician

We are in the midst of drastic changes in the medical, social, and economic aspects of the care of the aging and disabled members of our population. An ever increasing number of our people are surviving the onslaughts of infections, metabolic disorders, surgical emergencies, and trauma, only to find themselves later incapacitated by the infirmities of age or by the sequelae of the disease or injury from which their life was spared. Problems arising from treatment, feeding, housing, training, job placement, financing, nursing, and sometimes confinement of these needy subjects present a dilemma which involves almost everyone at some time or another. The physician long familiar with many of these problems must now shoulder even greater responsibilities.

Recently, new federal laws have made it possible for totally, permanently disabled persons over fifty years of age to receive Social Security payments. It will be the responsibility of the physician to examine these patients and report their findings. As far as is known, the decision whether the individual is permanently and totally disabled or not will be up to a bureau in Washington. If the person is judged totally and permanently disabled he is then referred to the State Rehabilitation Service who will then be charged with the responsibility to determine if the

person can be rehabilitated. If so, the Rehabilitation Service is then faced with three problems: the correction, so far as possible, of the physical or mental abnormality which has caused the disability, training that person in some field of endeavor, and finding employment for him.

Every Oklahoman has reason to be proud of the past record of our Rehabilitation Division of the State Board of Education. Since its founding in 1925 it has grown to its present stature under the capable direction of Mr. Voyle Scurlock and the cooperation of his efficient staff. They have carried on through the years with insufficient funds, making the most out of the least so that with the aid of the medical profession and various training agencies their efforts have repaid the state many times by the substantial income of the persons rehabilitated. All persons dealing with the Vocational Rehabilitation Division of the State Board of Education have complete confidence in the work of this group.

It would appear that this added load thrust upon the Rehabilitation Division of the State Board of Education by the provisions of the new Social Security law will place them in a more precarious position financially if additional funds are not forthcoming. In view of the fact that their past record indicates that they have consistently saved the taxpayers money, we believe that the additional funds needed for their efficient operation would

be a sound investment by the state legislative body. Likewise, the physicians of the state should encourage and support the development of private rehabilitation facilities where the disabled person may be referred for physical and mental restoration and later, "on the job" training after his primary medical treatment is ended.

Governor Gary is to be commended for his efforts in behalf of the handicapped. His appointment of a committee to facilitate hiring the handicapped has already borne fruit. Dr. Waldo Stephens, Chairman, and Mr. Don Davis, full-time Secretary, of the committee also deserve praise for their untiring efforts in behalf of the employment of the handicapped.

Goodwill Industries, Senior Citizens sponsored by the Y.W.C.A., the Salvation Army, all industries which retain and hire the handicapped, the Oklahoma County Association for Mental Health, and all other nongovernmental organizations who hire the handicapped deserve our continued support.

The private physician through his personal counsel and guidance, utilizing these agencies, will greatly reduce the need of further governmental socialization. The handicapped person wants nothing more than to be independent. As physicians, let us aid him in fulfilling his goal.

William K. Ishmael. M.D.

MAY 5-6-7-8

O.S.M.A. Annual Meeting

MAYO HOTEL

TULSA, OKLAHOMA

Scientific Articles

Laboratory Evaluation--

DEFECTIVE BLOOD CLOTTING

H. T. RUSSELL, M.D.

Recent advances in the field of blood coagulation make a revaluation of the process imperative at this time. Bleeding problems are one of the most common reasons for consultations with the clinical pathologist and are vital to all clinicians, from the General Practitioner to the most specialized. Better methods of therapy make a definitive diagnosis necessary. In the clinical practice of medicine the physician is interested in a practical approach to bleeding problems and is concerned with rapid and inexpensive methods of determining the cause of bleeding abnormalities. It is the purpose of this paper to present such a simplified method, knowing that such a simplification is too didactic and will be too incomplete to diagnose all cases. However, it will point the way for other studies. The method and principle in this paper are not the work of the author but represent the efforts of many workers who have contributed greatly to recent advances in this field. In general the principles outlined below are those which have the widest recognition and acceptance but the work of many outstanding authorities is omitted for simplicity.^{1, 2}

THE AUTHOR

H. T. Russell, M.D., was graduated from Washington University in St. Louis, Missouri, in 1947. He served an internship at the University of Chicago Clinics, Chicago, Illinois, and a residency in pathology at the Jefferson Davis Hospital, Houston, Texas, and Henry Ford Hospital, Detroit, Michigan.

Doctor Russell is a member of the Garfield County Medical Society and represents the society as Vice-councilor to the Oklahoma State Medical Association. He also holds membership in the College of American Pathologists and the Oklahoma Association of Pathology.

Doctor Russell established a home in Enid, Oklahoma, after his discharge from military service in 1953. He is now associated with the Northwest Oklahoma Medical Center there.

Clotting Mechanism

The process of blood coagulation normally is initiated when the blood vessel wall is damaged. The platelets in the damaged area react with the plasma substances to begin the slow formation of thrombin. As thrombin is slowly formed it has further lysing effect on the platelets and the reaction becomes autocatalytic and fibrin is formed explosively in the normal individual. The

A. Temporary Hemostasis

1. Reflex vasoconstriction

2. Agglutination of Platelets

Prolonged, generalized
vasoconstriction

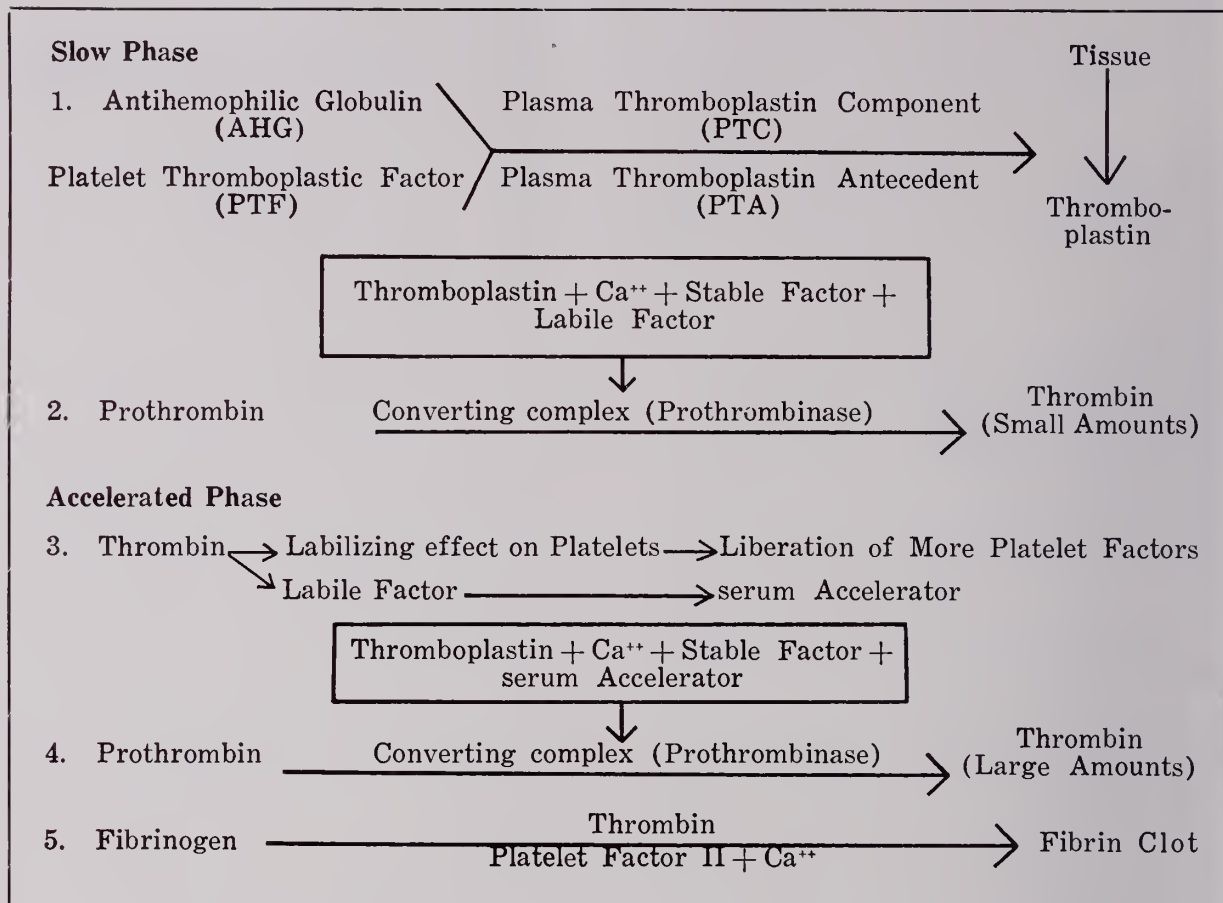
Coagulation of Blood

- A. Activation of Thromboplastin
- B. Formation of Thrombin
- C. Formation of Fibrin

3. Retraction of the clot

B. Permanent Hemostasis

4. "Organization" of the clot.



overall mechanism of hemostasis is outlined on page 101.³

This scheme emphasizes the central role of platelets in the process of hemostasis. Platelets: (a) Supply the vasoconstricting agent; (b) Activate thromboplastin, thus initiating the coagulation process. (c) Determine clot retraction.

The most acceptable theory of blood coagulation is outlined above.⁴

It can be seen from the outline that the clotting mechanism occurs principally in three stages. The first is concerned with inter-action of platelet factors and plasma factors to form thromboplastin. The second step involves the formation of a converting complex which utilizes thromboplastin, calcium and the thromboplastic labile and stable factors. These interact to convert prothrombin to thrombin. The last step involves the action of thrombin in the conversion of fibrinogen to form the fibrin clot.

Procedure

The plasma clotting time, Quick test, (one

stage prothrombin time), bleeding time and complete blood count are first done as screening tests. These four tests point the way for further examinations. If the complete blood count shows only anemia and the other tests are normal, then the bleeding is probably not due to hemostatic defect but to local abnormalities (i.e. endometrial polyps, local infections, tumors, etc.) and the clinician can turn his attention to the clinical evaluation and away from the laboratory.

The complete blood count serves to evaluate the degree of anemia associated with the bleeding and therefore is some indication of its severity. The smear should be checked for the presence of abnormal white cells and the quantity and quality of platelets should be noted. If platelets are deficient either in quality or quantity, the following procedures may be by-passed (at least temporarily) and evaluation of the platelets should be the next step (platelet count, clot retraction, etc.).

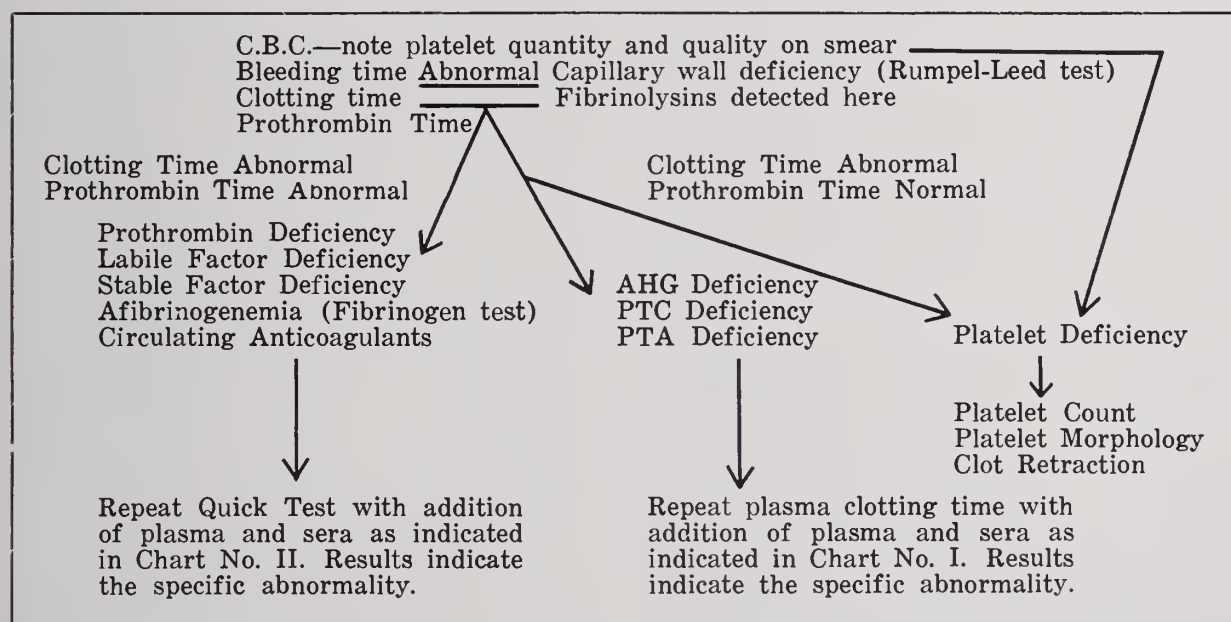
The bleeding time helps to evaluate the

stability and effectiveness of the vascular walls (with normal coagulation time) and the efficiency of the platelets. The plasma clotting time evaluates the entire clotting mechanism and is therefore relatively non-specific. However, in association with the Quick test, it is helpful in determining whether the abnormality of bleeding occurred due to poor formation of thromboplastin or after the thromboplastin has been formed. The Quick test evaluates the factors in clotting after thromboplastin formation because an adequate amount of the tissue thromboplastin (Simplastin) is used in this test thereby completely by-passing the early stages of thromboplastin formation. Other clotting defects such as increased fibrinolysin and circulating anti-coagulants can be recognized by these simple procedures if the technologist will simply observe the tests indicated in the following paragraphs.

Further subdivision of the clotting defects are based on the following facts.^{5, 6, 7} Normal

fresh plasma contains all the clotting factors except Ca^{++} . Plasma loses its AHG and its labile factor when it becomes aged. In addition these two factors are more or less completely utilized when blood is allowed to clot and therefore they are absent in normal serum. PTC and stable factor are not removed in the aging or clotting process but they are completely removed by absorption of normal plasma with $\text{Ba}_2(\text{SO}_4)$. Therefore, aged plasma and normal serum would not correct the bleeding due to AHG or labile factor deficiency but they would correct a plasma which had deficiency of PTC or stable factor. It then follows that absorbed fresh plasma, being deficient in PTC and stable factor, would correct a plasma which was deficient in AHG and labile factors but would not correct plasma with PTC and stable factor deficiency. With this information we can further subdivide the bleeding defects.

The over-all method of analysis is as follows:



Discussion

It can be seen that the deficiencies of platelets, anti-hemophilic globulin, plasma thromboplastic component and plasma thromboplastic antecedent will result in poor formation of thromboplastin. The diseases associated with these defects are hemophilia and related bleeding diseases.

Deficiency of prothrombin and stable and

labile factors will result in defective thrombin formation. These deficiencies are found in liver diseases, dicoumeralization and deficiency of Vitamin K. (However, an isolated deficiency of prothrombin is one of the rarest abnormalities.)

A deficiency of fibrinogen would result in inability of blood to coagulate and would interfere with the third stage of coagulation. Afibrinogenemia is the only disease associ-

EVALUATION OF FACTORS CONCERNED WITH FIRST STAGE BY USE OF PLASMA CLOTTING TIME

Chart No. I

Patient's Plasma	EFFECT ON PLASMA CLOT- TING TIME OF PATIENTS PLASMA WITH ADDITION OF:		
	Absorbed Plasma	Normal Plasma	Aged Plasma
Classic Hemophilia (AHG Deficiency)	+	0	0
PTC Deficiency	0	+	+
PTA Deficiency	+	+	+

+ Improvement or return to normal
0 No improvement

Use 9 part patients plasma to
1 part testing substance.

EVALUATION OF FACTORS CONCERNED WITH THE FORMATION OF THROMBIN

Chart No. II

Patient's Plasma	RESULTS OF QUICK TEST (One Stage thrombin Time) with added:			
	Normal Plasma	Normal Serum	Absorbed Plasma	Aged Plasma
Labile Factor Def. (Factor V)	+	0	+	0
Stable Factor Def. (Factor VII)	+	+	0	+
Circulating Anti- coagulants present	0	0	0	0
Afibrinogenemia	+	0	+	+

+ Improvement or return to normal
0 No improvement

Use 9 parts patients plasma to
1 part testing substance.

ated with this defect. Afibrinogenemic blood will clot with addition of normal plasma. However, an increase in fibrinolysins might also be placed in this category as this condition is associated with lysing of the clot shortly after it has formed and therefore the defect would appear at this level of the clotting mechanism.

The presence of fibrinolysins can be detected by the technologist simply by noting the destruction of the clot after it has formed. This is better seen in plasma than in whole blood. The tube should remain in the 37° C. water bath.

An additional group of diseases, associated with circulating anti-coagulants, can also be detected. These would include such conditions as heparinization and the so-called

collagen diseases, in which idiopathic circulating anticoagulants often appear.

Heparinized blood and afibrinogenemic blood are incoaguable. Heparinization can usually be ruled out by consulting the attending physician. Blood containing circulating anticoagulants will not clot with addition of normal plasma and the clotting time will often be lengthened.

A deficiency of calcium is not important because the level of calcium is always sufficient for clotting to occur.

The use of specific names such as parahemophilia, pseudohemophilia,⁸ etc. serve no useful purpose and should not be done. Naming of the abnormality by use of the specific factor deficiency pin points the area of the defect and decreases the confusion associated with proper names. (Hemophilia, due to its long term use, is an exception.)

The use of specific names for the various clotting factors is helpful when the names describe a property of the factor or when it describes its action (i.e. "plasma thromboplastin component" which indicates its action in thromboplastin formation or "labile factor" which indicates its ease of destruction by heat or aging).

Further pinpointing of the bleeding defect can often be done by use of the history and physical examination. Generalized purpura tends to be associated with platelet deficiency so in such a condition, the platelets can be evaluated first, thus by-passing much of the above procedure. Deep bleeding is usually associated with clotting defects. Afibrinogenemia is most often associated with child birth, particularly abruptio placenta.^{9, 10} Bleeding in such cases should make the clinician think of afibrinogenemia and a fibrinogen¹¹ test can be done immediately without doing the above procedures. (Afibrinogenemia may also be congenital).¹² Many other clinical states will suggest specific abnormalities. The procedures listed above are indicated in obscure cases.

Such an attempt to put a bleeding abnormality in such a distinct category is somewhat unjustified because many bleeding abnormalities represent a deficiency of more than one factor. However, the multiple factor deficiencies will be detected in most

instances and the identify of specific defects has practical value.

Methods

Bleeding Time—Make a uniform cut with a sharp clean blade (such as a Bard-Parker No. 11) in an ear lobe or forearm (use pressure cuff on forearm at 40 mm. Hg. pressure). Normal is 1-6 min.

Plasma Coagulation Time—Blood is collected in oxalate. Use 0.2 cc. of blood plasma and 0.2 cc. Ca Cl_2 solution at 37° C. Normal 90-110 seconds.

Quick Test—(One stage prothrombin time.) We have found Simplastin to be most satisfactory material and the directions accompany the material. Normal is usually 13 seconds. A control must be run with each group of test samples or at least once a day.

Reagents

Normal Plasma.—Fresh whole blood, 4.5 m., is mixed with 0.5 ml. of 0.1 M sodium oxalate solution. The blood is centrifuged (1000 rpm in a No. 2 International Centrifuge) for 5 min. The opalescent (platelet-laden) plasma is used in the various tests. It should be fresh.

Serum.—Freshly drawn blood is permitted to clot. Several hours later the clot is centrifuged and the serum removed. Hold the serum at least 24 hours at room temperature to permit maximal conversion of prothrombin to thrombin and destruction of the thrombin. Before use, the serum is decalcified with one-fifth volume of 0.1 M sodium oxalate.

Absorbed plasma.—A suspension of 50 mg. of BaSO_4 powder or 0.1 ml. of 0.1 M $\text{Ca}_3(\text{PO}_4)_2$ is added to each millileter of fresh, oxalated plasma. After intermittent mixing for about 10 minutes the mixture is centrifuged for about 10 minutes. The clear, supernatant plasma is incoagulable. This must be freshly prepared to retain AHG and labile factor.

Ca Cl_2 —As routinely used in Quick's test (0.025 M. in the original method; 0.02 M. in the revised technic).

Summary

Mechanisms of hemostasis and blood coagulation are reviewed. Most bleeding defects fall into one of the major categories: (1) Defective vascular walls. (2) Abnormalities of thromboplastin formation. (3) Defective thrombin formation and (4) absence of fibrinogen or lysis of the clot following its development. Circulating anticoagulants may interfere at any stage of coagulation and are manifested by inability of the blood to clot. This condition is not corrected by addition of normal plasma to the incoagulable blood.

Pinpoint the deficient clotting factor or factors by first doing a bleeding time, clotting time, prothrombin time and complete blood count. These procedures point the way for further studies.

Further identification of the deficient factors associated with poor thromboplastin formation is based on repeating the plasma clotting time with various known normal factors added. These are obtained from normal plasma and serum by fairly simple methods as described.

Identification of factor deficiencies in thrombin formation can be further identified by repeating the Quick Test with various known normal factors added.

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ARE PHYSICIANS EDUCATED?

I. PHILLIPS FROHMAN, M.D.

"Teaching is the art of imparting knowledge and sharing education."

"There are men and classes of men that stand above the common herd: the soldier, the sailor, and the shepherd not infrequently; the artist rarely; rarelier still, the clergyman; the physician almost always as a rule. He is the flower (such as it is) of our civilization; and when that stage of man is done with, and only to be marvelled at in history, he will be thought to have shared as little as any in the defects of the period, and most notably exhibited the virtues of the race. Generosity he has, such as is possible to those who practice an art, never to those who drive a trade; discretion, tested by a hundred secrets; tact, tried in a thousand embarrassments; and what are more important, Heracleian cheerfulness and courage. So that he brings air and cheer into the sick room, and often enough, though not so often as he wishes, brings healing." (Robert Louis Stevenson, Preface to Underwoods)

All physicians are educators. The moment we interviewed our first patient we began our life work as educators. When you gave directions to your first patient, there began your period as a teacher. By our own education, learning, and direction we have been subconsciously trained as teachers. We must teach our patients, and the interns and the residents. Likewise we must teach ourselves to learn, constantly and everlastingly. Education is the vehicle which the doctor builds and constantly remodels for his lifelong journey as a practicing physician. The distance he may go and the speed with which he may travel depend in the main upon the character of the educational vehicle he develops. The direction of his journey is a matter of his spiritual as well as his mental resources.¹

Must the Art of Medicine Be Pushed Aside By Ever Increasing Scientific Discoveries

In this age of ever-increasing scientific discovery, with its staggering expansion of our scientific knowledge, more than ever before in the history of medicine it has be-

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come necessary for those who wish to keep professionally informed to increase their scientific and medical knowledge. We general physicians are by no means exempted from this great necessity! It is obvious that none of us should endeavor to encompass the entire body of scientific fact, but some segment of all the facts is necessary in our everyday reading to better understand the progress, the future, and the constancy of scientific endeavor. Gentlemen, science in medicine is with us now, and forever more! I believe that the advancement of science, and the association of scientists with medical men will increase the necessity for many more highly specialized physicians, and for many more intensively trained general practitioners. The physical and social sciences may very well play as important a part in the medical school curriculum as anatomy, pathology, or physiology, in the not too distant future.

If this added education in science will tend to make the physician less and less the human being he is supposed to be and rightly must be, then I fear for our future generations of physicians. Patients want people—humans—physicians to get them well if possible; they are not healed by machines or by laboratory formulae, however brilliant. People today are becoming vaguely dissatisfied with the doctor as a person; they feel that he has become too commercial or too scientific, too busy or too preoccupied to

concern himself with their problems.² Will the increased emphasis on scientific theory in the study of pre-medicine and medicine continue to push aside the study of the humanities and the social sciences? Medical educators know that the students' pre-medical educational program is quite lopsided, and that almost from the beginning when a boy or girl decides to study medicine—to become a doctor—the confines of his or her interest tend to become more and more narrow. Medicine, which should have the widest contacts of any profession, almost ceases to be a liberal education, for its cultural outlook dwindles from the moment "professional" preparation is undertaken.³

The Physician and Culture

The wider and freer a man's general education, the better physician he is likely to be. In no other profession does culture count for so much as in medicine, and no man needs it more than the general physician, working under all sorts of conditions, and with all sorts of people. Osler⁴ stated, "that many of our patients are influenced quite as much by our general ability, which they can appreciate, as by the learning of which they have no measure." It is certainly well known by all educators that the physician's training ignores the social sciences and that he is not encouraged nor challenged to develop any degree of social understanding. Thus in practice we sometimes ignore, not purposely mind you, the social and environmental factors in the treatment of the patient's disease, his way of living, his family, his work, and his reactions to so many environmental and emotional stresses. I believe that the super-specialist is more likely to be at fault here, than is the average general physician. Severinghaus quotes Professor Theodore M. Greene who speaks of four essentials in the fabricating of a goal for all persons who seek an over-all program of education, including those who contemplate careers as physicians. (1) "Training in the accurate and felicitous use of language as the essential condition of all reflection, self-expression, and communication with others. (2) Training in the acquisition of factual knowledge of ourselves, our society and other societies, the physical world, and ultimate reality, so far as it is humanly know-

able. (3) Training in mature and responsible evaluation and decision in the controversial areas of social policy, morality, art and religion. (4) Training in synoptic comprehension, i.e., in the escape from the multiple provincialisms which bedevil mankind and in the attainment of larger and more inclusive perspectives." Add to these the additional knowledge and technical skill of a medical education, internship, and residency, if desired, and you have the full-rounded, intelligent physician. It has been our gross misfortune in the past that we have not had this type of educational training, and that even in this present far-advanced so called modern age of living and of educational opportunities, students are not yet guided into such a realm of education as is postulated by Professor Greene. I will not stop here to discuss the four postulates of Professor Greene since Severinghaus⁵ has elucidated so excellently upon them in the *Journal of the American Medical Association*, two years ago.

The Physician and Words

I firmly believe that much of the misunderstanding between the physician and his patients is the doctor's inability adequately and purposefully to use the English language. I believe we fail in many instances to say what we mean—as we mean to say it. I believe that in many instances, we are so linguistically incompetent, that as teachers trying to educate our patients about diseases and drugs, we miss our point and so does the patient—thus creating misunderstanding. In many instances what we say to our patients may sound false, yet we believe it to be the truth to the best of our knowledge; but our language is so inaccurate or even inadequate that our words become twisted into a maze of misinterpretation.

We must become sympathetic to, and educated in, all phases of the environments of our patients—their work, whether it be that of a carpenter, bricklayer, oil-rigger, plumber, musician, bank president, or shoeshine boy; their environment at home, and their recreation. This will fill out the history for our diagnosis. We must continue to learn and understand about music, painting, sculpture, politics; and likewise we must

learn how to speak to our patient-plumber, our patient-carpenter, our patient-bricklayer, or to our patient-of-whatever-trade; we must learn to "speak his language," as it were, for better mutual understanding. Let me cite one case in point.

Last summer I was asked by an insurance company to visit a construction job where a large building was to be erected. The job would have a minimum of 300 men and a maximum of 1000, working at one time. There were to be two sub-basements. I was to set up for them a safety program and a first-aid station. I was to care for all injuries sustained by these workmen at this job through my clinic. I called upon Mr. McCarthy, the gruff, blunt and tough foreman of this job, and began to explain the nature of my visit. Before I had well begun, he gruffly stopped me and stated that he could not bother sending injured workmen to my clinic, since it was too far distant (actually, only five minutes away), and for other reasons. I did not pursue this further, but immediately turned aside and looked down into the deep chasm of the sub-basement below and said, "Mr. McCarthy, that is a mighty big hole you have down there; those trucks look like beetles scooting back and forth." Before he could answer I continued "looks to me like about 2000 tons of concrete if you are going to pour a floating foundation, and about \$200,000 dollars worth of pile driving if you are going to use piles for support of this building." He started to open his mouth and say something, but I would not let up and followed my last sentence with "I guess you will be about three months getting out of that basement; I sure would like to come by occasionally to see how you come along on this job; it just interests me to watch it go up."

Of course, Mr. McCarthy was flabbergasted—here was a dude-looking doctor talking construction—"talking his language." I might tell you that I spent two more hours discussing construction, and viewing all the blueprints; and then Mr. McCarthy ended up by getting the exact route to my office and clinic and insisting he wouldn't think of *not* sending his men to me for treatment.

Here is but a single example of understanding, and getting down off the medical

perch. I am certain that each and every one of you have had something of this order occur. Such incidents illustrate the felicitous use of our language. The good medical education, and good post graduate education, is greatly enhanced through a better appreciation of the importance of language.

The Liberal Education and the Physician

For those of us who have not had the opportunity in our undergraduate days to acquire a liberal education in the sciences, in the study of the humanities, and in language appreciation and proper interpretation, it is imperative to do all we can with our few moments of spare time to embellish our minds now in these fields. Likewise it is important that medical students and interns of today be educated to develop a better appreciation of human values, increased interest in the patient as a person—including the patient's family and environment and his social attitudes, since all of these influence the health and well-being of the patient. We general physicians through experience—probably more than through training—have learned to recognize the importance of social and environmental factors in the cause, diagnosis, and treatment of a patient's illness. We can save many years of trial and error on the part of the recent graduate and intern if the medical schools, and those physicians who teach, will begin now to afford the student, intern and resident opportunities for closer contact with patients in the patient's own environments. This is truly education.

It has been stated by Doctor Jean Curran⁶ that the examination of the patient's chart in many teaching hospitals revealed the great importance of the attitude of chiefs of services. If the chief was himself interested in the patient as a person, then significant entries were found on the patient's chart; entries made at every professional level from the chief attending down to the third year clinical clerk! Furthermore, Doctor Curran observed that, if the intern or resident was transferred to another service where the usual atmosphere of indifference by the chief prevailed, he likewise became indifferent. These early years are formative in the education of the young phy-

sician, and the attitude and example of the chief of service is crucial. It is unfortunate that there is not a closer association between the staff physicians and the general physicians in the vast majority of teaching hospitals throughout this country. There is much we might learn from these physicians, and likewise, there is a great deal we general physicians, experienced in the attitudes and illnesses of our patients as persons, might very well contribute to the education of the professor. This distant association or lack of association is not of our doing!

Improved social and economic conditions these past twenty-five years or less have changed the "horse and buggy" doctor to an up-to-date scientifically trained general physician with the latest diagnostic equipment and with well-trained aides. This change has not lessened our warm hearted approach to our patients but rather our training has enabled us to practice better medicine and surgery with a minimum of disability and cost to the patients. This is good. Unfortunately the "ivory-towered medicine" practiced by most teaching institutions has not changed one iota! It is difficult to impress these teaching faculties that the curricula for students in medical schools must be changed with the progress of the times. If you will gather catalogues of various medical schools throughout this country and compare the respective courses of study individually or collectively you will find each a carbon copy of the others; you will find very little change from the 1930 to 1940 curricula in those of 1950 to 1957. Psychiatry is usually a minor or even an elective subject (and yet we are prescribing millions of dollars worth of tranquilizing drugs), x-ray techniques and hazards are not even in the prescribed curriculum, and most important of all, medical radiation biology is unheard of in our teaching institutions. Must we wait another ten years before the professors and deans of our medical schools re-arrange their teaching programs, omitting some segments of unimportant courses and inserting live educational material that may affect all of our lives in the near future? I would prefer to teach the student less about the number of foramina there are in the skull and more about atomic

radiation, psychosomatic medicine, and the importance of pharmacology.

Every prescription written by the physician involves a knowledge of pharmacology, toxicology and therapeutics. Yet, how little do we know, or will the recent graduate know, about the pharmacology, and toxicology of the drugs prescribed except for what the medical representatives tell us or the drug company sends us in the mail, championing a particular drug.

The effects of education are released slowly, as if by a time fuse, so that the true character of a particular educational endeavor is seen only after the passage of years. Unfortunately, we cannot wait too many years to change and add to our medical school curriculum and our own post-graduate education. The time is now for all of us.

The Magnitude of the Problems of College Education Now and in the Future

Let me startle you with a few figures on education in this country. All of us here attended a public school, yet we were unaware that we were participating in a revolution in education. It is interesting to note that between 1890 and 1956 the proportion of the appropriate group actually attending high school rose from 3.8 per cent to approximately 86.3 per cent; the numbers in the public high schools from less than 203,000 to nearly 41,500,000; and the number of high schools from a few thousand to more than 36,000. During this time the curriculum underwent expansion and diversification, and the so-called "college preparatory course" was found unsuited to the enormous new spread in the interests and abilities of high school pupils. Today the movement to extend the period of formal education for all American youth is being pushed forward to include the college education. In 1900 less than 5 per cent of those of college age went to college; they numbered only 230,000. By 1930 there were about one million students enrolled in colleges. Today there are 3,200,000 in college and this might very well be doubled within the next 10 years. It is very possible that before the end of this century one out of every two Americans will insist on going to college.

Since 1945 very few communities have escaped the burden of building additional elementary and high schools, and increasing their teaching staffs. This task is still not completed. Within five years the problem will have engulfed the colleges. It has been estimated that we will have to duplicate the number of colleges available today, colleges which have grown up slowly during one hundred and fifty or more years. The cost will be in the realm of some 15 billion dollars. And yet, we are speaking of today, and a population of 164 million people. Consider our problems in education by 1980 with an approximate population of over 200 million! Consider the type of education required by our technological advances, and the multiplication of scientific and medical knowledge that is shaping our world. Education feeds upon education and therefore demands more and more education. There is a certain inevitability, a kind of compulsion, governing the development of education. Medical education is no exception. Since we are unable, for lack of money and teachers, to expand our schools of medicine then we must arrange and re-arrange our curricula, replacing moribund memorizations with up-to-date live subjects.

Although some say that medical school is merely a pathway to economic advancement for those who attend, I do not agree; when the trials and tribulations inherent in the practice of medicine, the hard work and long hours, and the long grind ahead before earning power is established, are weighed and considered by the prospective doctor-to-be, something within him must move his soul to set forth on the toilsome road. I like to think of this something as courage, devotion, dedication, or vocation. Too many of us hesitate to use these words for fear that we may be called sentimentalists.

Wanted: Good Teachers

Continued improvement in the quality of physicians depends less on numbers than on fresh insights, extraordinary efforts, and novel achievements by a few individuals of exceptional ability who, having received the necessary exacting training are encouraged to go beyond average attainment. Although in the future, training in medical school and postgraduate education will be available for

larger numbers of doctors, it is even of greater importance that we now turn seriously to the task of developing an exciting and demanding kind of education, designed to draw out the highest potentialities in each group. This problem lies within the scope of the medical classrooms, the universities, the hospitals, and the teachers of post graduate courses. Classrooms or hospitals in which there are teachers without exceptional gifts are places where doctors may spend their time, but where they cannot invest it with profit to themselves or their profession. Lack of vitalizing personal qualities in the educative process is more deeply and tragically injurious than our professorial colleagues have yet been ready to recognize. When the student's or intern's imagination^{*} is not stirred, or when he merely suffers through his medical school or hospital training, for lack of adequate teacher stimulus, he not only fails to develop whatever potential may be in him to project new ideas, new approaches, and new socio-medical advances; but he is actually being prepared merely to join the ranks of those specialists or general physicians who are indifferent or even hostile to the claims of intellect. Their numbers, always too large, impose a heavy drag on every effort in medical and surgical advancement. The most important consideration is always the individual human mind. Fresh ideas have always been born from the minds of individual, unregimented men or women, who are motivated by curiosity, who are properly prepared, and who are devoted to learning for learning's sake.

It is true that we are educating young men to be quite competent in the various specialty fields and in general practice. But are these physicians being trained to be understanding—since understanding requires wisdom? Are we not misinterpreting the true meaning of understanding as compared to competence? Understanding and competence are not synonymous. One can be competent without being wise. It is this everyday wisdom that we general physicians, given the opportunity, might very well bring into the medical schools and hospitals.

We have a higher obligation in the education of young men and women to become

doctors. We must try to produce dedicated scholars, medical investigators; medical men capable not only of productive research, but able, also, to present their findings in language so clear that it will carry their conclusions forward, to the advancement of knowledge in all fields of medical and surgical endeavor. Those with the capacity to do original, basic investigation must be found, sent forward, given every opportunity for their own intellectual development, and encouraged to stay at basic research or to teach in an environment of freedom and high purpose.

Yes, I speak of ideals. Perhaps there is some of the dreamer within me, but when I think of the Oslers, the Grenfells, and the Albert Schweitzers, who shine as great stars in the medical horizon, I have yet much hope for the future. Some of you, perhaps, like myself have been scoffed at by your fellow physicians for wanting to do much community service, or to write and read, or to develop new ideas. Why are we present day physicians hesitant and timid to use the words "devotion," "dedications," or "vocation," which are among the most beautiful in our vocabulary?

The responsibility of medical educators does not begin and end with the mere "rote" of things in medicine. It is as important that these men realize an ultimate and more difficult responsibility to insure that a sense of loyalty, sensitivity to health and disease and the social order, and a broad interest in the need for humility and patience is part of a doctor's life and learning. Our medical educators must be of such caliber to impart this wisdom.

Education and the General Physician

As I have previously stated the physician must be a lifelong student. The general physician is no exception. In a survey by Vollen⁷ he found that the average general physician devoted over three-fold the amount of time to postgraduate medical education than did the specialists. There are many reasons for seeking postgraduate education, but I like to feel that all of us here today seek but one thing, a strengthening of our medical knowledge armament. Possibly to gain a new perspective about an old disease, or a new method of treatment or approach

to many of the problems that beset our patients. We seek, I am sure, practical applications for the things we see and hear today. We have been fortunate in these past few years that the vast majority of postgraduate courses have been geared and aimed for the general physician. Educators have realized that the needs for further education of the general physician could not be satisfied in the clinics, during hospital rounds, or in medical society meetings. Likewise, courses must be offered by physicians who realize that every word, every picture, and every motion must be meaningful. The general physician-student has no time to waste, and every minute spent in postgraduate education is time and income lost from his practice. We general physicians have less time than other physicians and non-physicians. Our usual work week is at least a minimum of 60 hours rather than the 40 hour norm,⁸ and the soon to be 35 or 36 hour work week. Add to this the time we spend in reading, hospital staff meetings, and attendance at various society meetings each week; even the third grade student would not need a blue print to see that our time is at a premium.

It is unfortunate for both the general physician and the medical colleges that we have been isolated from their confines after once beginning practice as *professed* general physicians—family doctors! I would like to stop here and remind our professors of the words of Osler:⁹ "There are many problems and difficulties in the education of a medical student, but they are not more difficult than the question of the continuous education of the general practitioner. Over the one we have some control, over the other, none. The university and the state board make it certain that the one has a minimum, at least, of professional knowledge, but who can be certain of the state of that knowledge of the other in five or ten years from the date of his graduation? The specialist may be trusted to take care of himself—the conditions of his existence demand that he shall be abreast of the times; but the family doctor, the private in our great army, the essential factor in the battle, should be carefully nurtured by the schools and carefully guarded by the public. Humanly speaking,

with him are the issues of life and death, since upon him falls he grievous responsibility in those terrible emergencies which bring darkness and despair to so many households. No class of men needs to call to mind more often the wise comment of Plato that education is a life-long business."

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Cardiac Arrest:

MASSAGE WITHOUT INCISION

HUGH A. STOUT, M.D.

What I hope to propose here is something more physiologically sound, more effective and something that should produce better long-term good results than kneading hearts with calcified and atherosclerotic coronary arteries with traumatizing, frustrated hands. Recently, because of two sets of unusual experiences, it has become a steadfast conclusion of mine that the rough "massage" of the heart with the hands is not the best way to revive a "dead" patient, and that the entire problem can be approached more sanely and more scientifically.

The first experience concerns three autopsies performed in our department on cases whose hearts were massaged with death ensuing a few minutes to two hours following revival for cardiac arrest in the operating room. One case was that of a 36 year old colored male who was quite obese, but with no previous evidence of cardiovascular disease. The other case was that of a woman in her middle fifties who was slightly obese, but again without evidence of previous cardiovascular disease. The third case was that of a 57 year old woman who died on the operating table this year, and after cardiac massage. An autopsy was done which showed massive, firm thrombosis of the entire left descending arterial tree and massive infarct of the myocardium in its distribution. The coronary arteries generally were yellow on cross-section with pinpoint lumina, and a significant amount of calcification.

THE AUTHOR

H. A. Stout, M.D., graduated from the Oklahoma University School of Medicine and later took postgraduate work at the University of Minnesota Medical School. Before coming to Oklahoma City, he was located at the Massachusetts General Hospital and the Mayo Clinic.

Doctor Stout is a specialist in Pathology and Internal Medicine and is an Assistant Professor of Pathology at the University of Oklahoma School of Medicine.

Doctor Stout holds membership in the Oklahoma County Medical Society, the Oklahoma State Medical Association and the American Medical Association. He is also a member of the Oklahoma State Pathologists Association, the Oklahoma City Clinical Society, American Society of Clinical Pathologists, May Foundation, Blue Cord, Phi Beta Kappa and Sigma Xi Fraternity.

Since microscopic examination of the myocardium showed no evidence of necrosis or other pathology, we feel that the deaths were sudden since the muscle did not have time to develop the microscopic signs of infarction. The coronary arteries were thrombosed and showed the atherosclerosis, but the absence of infarction of the muscle, except in the last case, is good evidence that the cardiac arrest was not due to coronary thrombosis preceding the massage of the heart.

At autopsy all three cases showed the most extensive coronary thrombosis one could imagine. Both major coronary trees were tightly plugged with firm red thrombi extending from beginning into most of the

small grossly visible branches. There was extensive yellow atherosclerotic thickening of the walls of the major coronary arteries, with minimal calcification in two of the cases, while in the other case there was fairly extensive calcification with not so much yellow thickening. Obviously massage of the heart in adults should not include massage of sclerotic coronary arteries and essentially all adults have this. Since it is impossible to effectively massage the heart without including these branches I would like to propose something else.

My second experience has to do with an encounter with cardiac arrest in my own office. We were in the process of doing a sternal bone marrow aspiration on a young adult who had been previously in good health except for a moderate anemia for some months, with hemoglobin levels ranging from 7.5 to 10 grams and poor response to usual therapy. In this case we elected to do the aspiration in the body of the sternum which lies directly over the heart. Ordinarily in adults I prefer the manubrium sterni because it is a more firmly fixed bone, up away from the heart, wider, less painful, and quite constantly has good bone marrow in it.

After performing hundreds of bone marrow aspirations I am quite certain that the pain produced in the center of the body of the sternum simulates that of coronary thrombosis and is probably worse and more frightening. The above mentioned patient suddenly seemed to die while the pain was at its worst because the head fell to one side, the heart stopped beating, and respirations were not coming back while we tried elevation of the feet and artificial respiration compressing the thoracic cage. The patient was lying on his back and it occurred to me from an experiment which I had seen Doctor Krogh¹ demonstrate in 1938, that something much better might be done. Doctor Krogh showed that almost a gallon of blood will gravitate into the legs when the feet are inclined downward while the patient is lying on a table on his back, as demonstrated by later inclining the head downward and the feet up. A diuresis follows in this experiment with a large amount of clear urine excreted. I therefore put my right arm under the patient's knees and jack-knifed the patient, thrusting the knees up into the epigastrium

and on to the lower chest, actually rocking the hips up off the table with the buttocks higher than the heart. This would necessarily thrust a column of blood from the leg veins up through the inferior vena cava into the right auricle of the heart where the sinus node is located, stretching the right auricle and forcing blood into the right ventricle through the tricuspid valve. There are no valves or obstructions to prevent this flow of blood upward and actually the valves in the leg veins would prevent its flowing backward into the legs. By using a knee-pumping action, then, pressing the knees together and pressing the thigh muscles against the abdomen and lower chest, then relaxing the knees to vertical, and the back to horizontal position, one can continue this knee-pumping action at sixty or more times per minute and not only dilate the heart from the inside with a bellows-type action, but throw columns of pressure also up the aorta into the arch where the cardiac nerve plexuses are located with afferent sympathetic stimuli being made available to the vasomotor center of the brain, with internal pressure also against the carotid sinus and some vascular dilatation exerted inside the skull itself. Following approximately three motions of this type our patient suddenly gave a generalized convulsive movement then awoke and has remained well. This convulsive movement apparently is not an unusual thing in revival from cardiac arrest, since I know that it happened in at least two other cases, the convulsive movement itself throwing the blood from the periphery into the systemic circulation.

This might seem like an unusually simple procedure and antishock positions have been used in the past, but so far, I have not been able to find in the literature any description of this particular technique for revival after cardiac arrest. The usual procedure is to stick needles into the patient's heart, or nowadays to make a sudden incision over the heart, thrust the hand between the ribs and massage the heart, and rarely when available use an electrical stimulator. In the operating room frequently a machine is used for mechanical continuation of respiration, and some have even used mouth-to-mouth breathing, but these respiratory methods are not effective in stimulating the heart beat. The successful cases reported have been primarily

in young people. One man recently has tried hammering on the chest with success, although personally this does not seem to me to be the most logical method of revival. In fact, the method outlined above would not only dilate the heart internally, but would shift its position and cause some motion in this respect also.

I suppose all of us have seriously wondered when some heroic person is going to massage our own hearts unnecessarily and I will never agree that manual massage is a really good method in the presence of advanced arteriosclerosis until other measures have been tried. The above outlined method could easily be used for a half-minute or so, and massage could still be used, if necessary later.

To go further one would think that since it is the stretching of the muscles that makes it contract, and since the heart has its own built-in automatic stimulating battery in the sinus and aV nodes, it would seem that any method which would stretch the heart from the inside, and then allow it to contract, would always be the best method.

It is well known that the animal heart will beat for two hours or so in a salt solution completely amputated from the body, and that it does not depend upon the brain or nervous system for its automatic beat. Even with massage the stretching mechanism probably makes the heart resume its beat. The brain can do without its blood supply for at least four minutes and return to nor-

mal so that there is plenty of time to use a method other than surgical massage. Some device might be developed, such as a trocar inserted into the venous system to attempt to dilate the heart with a large column of blood, or in fact, might be inserted into the heart itself and might even have an electrode attached to it. Such a method as this would be even less radical than cutting open the chest and massaging calcified coronary arteries with a frustrated totally irregular hand.

At least some standardized exercise should be recommended and automatically tried in a sufficient number of cases to become a standard procedure, preceding manual massage, and I would like to recommend the method proposed here, at least as a preliminary measure until some more scientific and constantly reliable method is established.

Many failures occur following cardiac massage and when the proposed method above fails it will likely be in the same cases where massage will fail but coronary thrombosis will not follow the knee-pumping method so that there should be a greater number of successes in the long run.

The method proposed could be used on the operating table even with an open surgical wound with bleeders tied off. Oxygen and mechanical respiration could be used simultaneously.

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Fund Drive for Research Foundation Underway

Oklahoma physicians are again showing their interest in and support of the Oklahoma Medical Research Foundation.

Teaming with members of the Life Underwriters association in Tulsa and Oklahoma counties, physicians are contacting each other, seeking three year pledges to the work of the Foundation.

"The support of the physicians of Oklahoma, who originated the idea of the Foundation, is important for two reasons, because their pledges will total a quarter of a million dollars over a three year period, and, of equal importance, because their support

will favorably influence the business people of the state who are also to be seen during this year," Hugh Payne, executive officer of the Foundation explained.

Doctor Evans Talley of Enid is state chairman for the effort, with Dr. John R. Taylor of Kingfisher the chairman for western Oklahoma and Dr. Carl Bailey of Stroud the eastern Oklahoma chairman.

Teams consisting of an insurance man and a physician have already made visits in 33 counties, where 309 physicians have pledged \$78,000 to the work of the organization.

Special Article

*This is the third in a series of articles prepared
by the University of Oklahoma School of Medicine*

The SCHOOL of MEDICINE

JOHN W. DeVORE, M.D.

One of the most challenging and important medical developments growing out of World War II was in increased knowledge of and interest in the rehabilitation of disabled individuals. The humanitarian aspects of rehabilitation are obvious, not only from the self-respect gained by the individuals who can again take care of himself, but by the release of other members of the family who would otherwise find it necessary to devote their entire time and energy to the care of the disabled individual.

The Oklahoma State Rehabilitation Division estimates that there are 40,000 disabled individuals in the State. Approximately 6,000 of these are known to the Bureau of Vocational Rehabilitation. Of these 1,200 are being rehabilitated annually. Four thousand new disabled individuals are added each year, so that there is a yearly accumulation of 3,000 individuals for whom no rehabilitation program is currently available.

In the last two years, approximately 2,500 persons have been rehabilitated through the activities of the Division of Vocational Rehabilitation. The previous earning ability of this group was approximately \$499,000, and after rehabilitation it was \$4,805,000. This improved earning capacity was obtained at a rehabilitation cost of \$892,000, or an average of \$356 per case. It has been estimated that the taxes paid by this group within two years after rehabilitation will be \$961,000. When this is combined with the estimated savings to the State in public assistance of \$993,000, it yields a net gain of \$1,062,000 in the first two years following rehabilitation.

In Oklahoma at the present time, there is one rehabilitation center which is a part of the Oklahoma A & M School of Technical

THE AUTHOR

These articles have been prepared by the University of Oklahoma School of Medicine by John W. DeVore, M.D., instructor in the Department of Medicine. Doctor DeVore has had the cooperation and encouragement of the Faculty Board in the preparation of these papers.

Training at Okmulgee. The center is four and one-half years old and has a capacity of approximately 50 patients. The center is primarily for patients who have vocational potentialities. Since it is not a hospital facility, it cannot take care of patients needing special medical and nursing care prior to the initiation of their rehabilitation program. Patients come to this center from nine states, and 35 states are represented in the Okmulgee trade school . . . so that Oklahoma is at present demonstrating outstanding leadership in the training of disabled and handicapped individuals. The problems encountered have emphasized the need for a rehabilitation facility of a different type in Oklahoma which should be associated with the University of Oklahoma Medical Center. Since October, 1954, the medical direction of the rehabilitation center at Okmulgee has been dependent upon a staff member of the Department of Physical Medicine at the University of Oklahoma Medical Center. Better co-ordination would be possible between preliminary medical care and subsequent vocational rehabilitation if a medical rehabilitation facility were developed at the University of Oklahoma Medical Center. The complete program would require team-work between the various specialists within the Medical Center and the psychiatrist, psychologist, social worker and vocational counselor. The Oklahoma City Goodwill Industries, the National Foundation for Infantile Paralysis,

the Tuberculosis Association, and various other agencies have played an important role in the current program and they are interested in the future development of the program.

At present, our State does not have available a medical rehabilitation facility similar to those in many other states. Hill-Burton funds for approximately \$150,000 have been allocated to the State for the specific purpose of providing half the cost of constructing a medical rehabilitation center. Unless a matching appropriation from sources within the State is made available before July 1, 1957, the Federal allocation will begin to revert for use in other states.

The tremendous financial return from such an investment makes an appropriation of the matching funds mandatory, in the opinion of the author. According to the Chairman of the Department of Physical Medicine, Doctor S. G. Gamble, approximately 75 percent of the funds necessary to finance the operation of such a center would be available without additional State appropriations.

Operation of a rehabilitation center must be a co-operative effort of the clinical departments within the Medical Center. One portion of the work must be performed by the Department of Physical Medicine. Hospitals that attempt to obtain the services of a psychiatrist or of trained physical therapists and occupational therapists are aware of the shortage of personnel in these fields. The Medical Center is particularly fortunate in having two full-time faculty members in its Department of Physical Medicine and a fulltime psychiatrist in the Veterans Administration Hospital. The School of Physical Therapy is continuing to grow. Students are required to take a four-year course, the last year of which is taken in the Medical Center. There are seven physical therapy students on the medical campus this year, and 12 are scheduled to enter their fourth year of training next year. Progress is, therefore, being made by the Department of Physical Medicine and the School of Physical Therapy in providing additional personnel for the State in this field. Only minor changes in the budget have been requested by Doctor Gamble for the coming biennium

since the space necessary to the future program of the department is the primary requirement during the present biennium. The humanitarian and economic benefits of the development of the proposed medical rehabilitation program are perhaps the greatest that can be expected from any field of medicine.

Department of Biochemistry

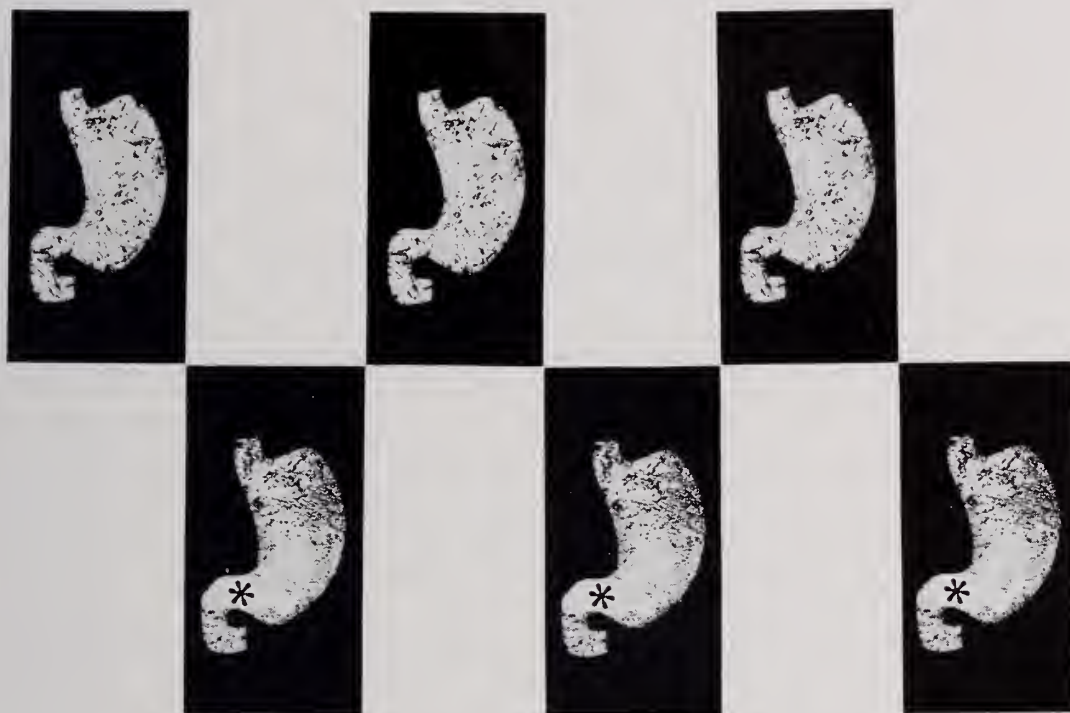
Doctor Mark R. Everett, as Chairman of the Department of Biochemistry, and more recently as Dean of the School of Medicine and Director of the Medical Center, has provided leadership not only for the development of his department but for the entire Medical Center. Despite a vital interest in his own department, he has avoided providing it with more than the normal proportion of funds. With a staff of five professional teaching biochemists salaried by the School, and five biochemists employed through research funds at the Oklahoma Medical Research Foundation and the V.A. Hospital, the department is playing a vital role in the Medical Center teaching program. To the teaching of medical students has been added a program for graduate training in biochemistry, instruction of nursing students, dietetic interns, and laboratory technicians, and consultation and advice to members of the other departments of the Medical Center. The proficiency of the department has been limited by the low salary scale in comparison with other medical schools. This has resulted in the resignation of five members of the staff during the last twelve years to take more remunerative positions. Funds for necessary scientific equipment have been equally inadequate. Doctor Everett has estimated that a 50 per cent raise in the department's budget would increase the efficiency of the department 100 per cent. The department also needs a full-time secretary, stipends for graduate students, and many major items of equipment which are essential to a modern department of biochemistry.

Department of Anatomy

The Anatomy Department has for many years been one of the most active teaching departments in the School of Medicine. Under the leadership of Doctor Ernest Lach-

(Continued on Page 138)

TRUE ANTICHOLINERGIC ACTION



Pro-Banthine® Inhibits Excess Parasympathetic Stimuli in Peptic Ulcer

Medical literature now contains more than 500 references to the beneficial role of Pro-Banthine Bromide (brand of propantheline bromide) and Banthine® Bromide (brand of methantheline bromide) as evidenced by a marked healing response of peptic ulcers. Rapid symptomatic improvement, particularly with reference to pain relief, is followed by roentgenographic demonstration of crater filling.

The therapeutic action of Pro-Banthine in

decreasing hypermotility and hyperacidity, together with the remarkable early subjective benefit, is a desired approach in the management of ulcers.

The initial suggested dosage is one tablet, 15 mg., with meals and two tablets at bedtime. An increased dosage may be necessary for severe manifestations and then two or more tablets four times a day may be indicated. G. D. Searle & Co., Chicago 80, Illinois, Research in the Service of Medicine.

SEARLE

PRESIDENT'S LETTER



It is my opinion that any Governmental program designed to spend tax dollars where a need does not exist, or where its citizenry have not made a serious attempt to fulfill their own needs, is Socialistic. The present Federal Budget is staggering, but until the people of each County and State stop asking for dollars from Washington, I see no surcease to our present tax structure. The members of this profession must take a more active interest in all legislative proposals, both on the national and state levels. Good Government and Economy should be synonymous. Apropos of how the Government spends our money, I think my three readers will get a chuckle out of the following thoughts, expressed by John McCutcheon in one of his *Chicago Tribune* columns. I suggest that it be read every other day.

"We always have trouble thinking in terms of billions, so when the proposed federal budget for 1957 appeared in print, we translated it into terms of a family with an income of \$10,000 a year. What would this family's budget look like, we wondered, if it were allotted in the same manner as the government's?

"First we should note that this family is one of the two or three most influential ones in a town of perhaps 100 families. The town is completely isolated, and the only significant sources of trouble are the personal and sometimes troublesome ambitions of the very same big shots who run the town.

"Our figuring produced a very odd budget, and while we will not make any specific criticisms, we would hate to have that sort of budget ourselves. And as for our wife, she would never stand for it. Here is what this family does with its \$10,000:

"It hires a policeman for \$6,200, mainly to keep an eye on No. 2 big shot, an unpredictable character who lives across town. It pays \$1,050 interest on money borrowed to hire the policeman. It pays \$750 to a retired policeman, and it gives \$300 to neighbors who, it hopes, won't object when the policeman steps on their lawns, and may even help him at his job. With these items out of the way, there is \$1,700 left for use of the family.

"However there are a number of sons who have been pretty expensive recently. One has really had a tough time, what with illnesses, etc., and he gets \$450 a year to keep him going. The others are in one trade or another, such as farming, labor, and mining. In recent years, because of jealousies, parental meddling, etc., relations have become strained with their parents and with one another. They now get about \$950 a year just to keep the domestic peace.

"The mother keeps the home going on what is left: \$300."

H. M. Clare M.D.
President

Association Activities

A.M.A. Sponsors Doctor-Lawyer Meetings During March

The American Medical Association will sponsor three regional Medical-Legal Symposiums in March to discuss mutual problems of the two professions. The day-and-a-half meetings have been scheduled as a follow-up to similar sessions held in the fall of 1955.

Dates and locations for the Friday and Saturday symposiums are: March 15-16 at the Atlanta-Biltmore Hotel, Atlanta; March 22-23 at the Cosmopolitan Hotel, Denver; and March 29-30 at the Benjamin Franklin Hotel, Philadelphia.

Topics to be discussed include trauma and disease, medical expert testimony and the medical witness. On Friday afternoon, Doctor Herman A. Heise of Milwaukee will speak on the use and background of scientific tests for intoxication to be followed by a mock trial demonstration. Participants in the mock trial include AMA staff personnel and Lt. Robert Borkenstein, inventor of the testing device known as the "Breathalyzer."

On Saturday morning, a doctor-lawyer panel will discuss trauma and cancer followed by a question and answer period. After luncheon, Irving Goldstein, a Chicago attorney, author of *Trial Technique*, *Medical Trial Technique*, and editor of *Medical Trial Technique Quarterly*, will speak on the medical witness and expert medical testimony. Winding up the program will be a showing of the movie, "The Medical Witness," and a question period.

American Medical Association and American Bar Association representatives will be at each meeting. AMA spokesman in Atlanta and Philadelphia will be Doctor David B. Allman, president-elect; and in Denver, Doctor George F. Lull, secretary-general manager.

Registration fee for each symposium will be five dollars to cover the cost of the luncheon and any published proceedings. Advance registrations should be sent immediately to the AMA Law Department, 535 N. Dearborn Street, Chicago 10, Illinois.

Cancer Films Available

Six films in a series of "Physicians Conferences on Cancer" are available from the American Cancer Society in Oklahoma City, according to Joe M. Parker, M.D., Oklahoma City. Fourteen other titles in the new series may be obtained on advance notice, said Doctor Parker, who is chairman of the ACS Oklahoma Division professional education committee.

Featuring widely-known specialists, the films are suitable for programs of county societies, specialty groups, hospital staffs, etc. They were originally presented as closed-circuit television programs in the East, originating from Francis Delafield Hospital at Columbia-Presbyterian Medical Center and the Memorial Center for Cancer and Allied Diseases associated with Cornell University Medical College. Typical of the practitioners presented are these: Cushman A. Haagensen, M.D.; Arthur Purdy Stout, M.D.; Howard C. Taylor, M.D.; Hayes Martin, M.D.; George N. Papanicolaou, M.D.; and others.

A catalog of these and other films in the field of cancer is available from the American Cancer Society, Oklahoma Division, Commerce Exchange Building, Oklahoma City 2, Oklahoma.

Doctor Bailey Gives Hospital for Research

Carl H. Bailey, M.D., a practicing physician of Stroud announced in January that he and his wife Gladys have given the Stroud General Hospital to the Oklahoma Medical Research Foundation.

Including the equipment in the hospital clinic, the gift is valued at \$157,000. The Foundation signed a contract with Doctor Bailey whereby he will continue to operate the hospital as in the past.

A graduate of the School of Medicine of the University of Oklahoma, Doctor Bailey was one of the original supporters of the Foundation, has always been active in its leadership and is now secretary of the organization.



Seen chatting before the stylized caduceus which is the focal point of the Conference Room are left to right: O.S.M.A. President H. M. McClure, M.D.; John Jarman, U. S. Representative; J. F. Burton, M.D., President-elect of the Association; Elmer Ridgeway, Jr., M.D., President of the Oklahoma Chapter of the American Academy of General Practice; and R. Q. Goodwin, M.D., Past President of the O.S.M.A.

Open House Held at New Executive Offices

Several hundred guests and members attended the Open House held at the new executive office of the Oklahoma State Medical Association. The five thousand square foot contemporary structure was teeming with well-wishers when the Association rolled out the red carpet on Sunday afternoon, February 3. Adding significance to the occasion was the fact that the Association was also celebrating its fiftieth anniversary since the amalgamation of the In-

dian and Oklahoma Territorial Medical Societies.

Over 2700 invitations were mailed for this occasion. Dentists, attorneys, bankers and civic leaders were among the various groups invited. In addition, newspaper publicity extended the welcome mat to the general public.

To preserve the historic flavor of this event, colored and black and white motion pictures were taken. The films will be sent

to the Department of Archives at the University of Oklahoma, where they will be added to the extensive historical medical records on hand there.

On hand to greet guests were: President H. M. McClure, M.D., and Mrs. McClure; Vice-president F. S. Etter, M.D., and Mrs. Etter; Executive Secretary Dick Graham; and Associate Executive Secretary Don Blair.

Members of the Woman's Auxiliary assisted in the hospitalities by showing guests through the building. Ladies serving on Mrs. Charles Freeman's hostess committee were: Mrs. William E. Eastland, Mrs. Delbert G. Smith, Mrs. Louis S. Frank, Mrs. George H. Garrison, Mrs. James T. Bell, Mrs. Arthur Elliott, Mrs. Jess E. Miller, Mrs. C. B. Dawson, Mrs. Charles R. Rountree, Mrs. Harry A. Daniels, Mrs. Joseph J. Maril, Mrs. James Amspacher, Mrs. John Carey, all of Oklahoma City.

Guests in the background browse through the new building as Doctors J. B. Miles, Anadarko, Paul B. Champlin, Enid, and Charles F. Obermann, Oklahoma City, enjoy visiting together in the general office area.



Listening to the music of harpist Mrs. Frances Clayton are left to right: Forrest Etter, M.D., Bartlesville, Vice President of the O.S.M.A., and Mrs. Etter; H. M. McClure, M.D., Chickasha, President, and Mrs. McClure; Mrs. J. F. Burton and Doctor Burton, Oklahoma City, President-elect, and L. G. Livingston, M.D., Cordell, who is a member of the Council.



Admiring the orchid plant which an Oklahoma City florist sent on the Open House occasion are Mrs. J. F. Burton, Oklahoma City, wife of the President-elect of the Oklahoma State Medical Association; Mrs. L. G. Livingston, Cordell, President of the Woman's Auxiliary to the O.S.M.A.; and Mrs. H. M. McClure, Chickasha, wife of the President of the O.S.M.A.

A.M.A. Prepares Guide For Voluntary Health Agencies

During the past several years the AMA has had many inquiries relative to the National Voluntary Health Agencies. During the past two years a special committee of the Board of Trustees has been working on this problem and has prepared some "Suggested Guides to Relationships Between Medical Societies and Voluntary Health Agencies."

This special Committee on the Relationships of Medicine to Allied Health Agencies is composed of Doctors Sidney J. Shipman of San Francisco, Paul A. Davis of Akron, Paul C. Swenson of Philadelphia, Leonard W. Larson of Bismarck, N.D., Elmer Hess of Erie, Pennsylvania, Louis A. Buie of Rochester, Minnesota, and David A. Wood of San Francisco. The committee is planning to review the programs of the various national voluntary health agencies and will offer its services to such agencies on matters concerned with medical care, medical research, health education, and medical profession relationships. In turn, it anticipates reporting to the medical profession from time to time on its findings and recommendations.

Suggested Guides to Relationships Between

Medical Societies and Voluntary Health Agencies

Good health and the prevention of disease are two objectives in which almost everyone is interested. Evidence of this is shown by the widespread growth of the many voluntary health agencies, local, state, and national. Through gifts of time and money, millions of Americans show their desire to help in the combat against illness and disease.

Physicians, as citizens, have the same interest as do other Americans in good health and in preventing disease. At the same time, physicians, because of their special training, recognize that they have a singular responsibility as guardians of the individual's and nation's health. Physicians also recognize that there is a natural emotional response on the part of individuals towards pleas of help to aid the unfortunate.

There comes a time, however, when those activities which arouse natural emotional responses should have some evaluation and guidance.

With the ever increasing number of national agencies in the health field and the parallel increase in demands both upon the physician's time and the public's

dollars, it would seem that the time for evaluation and guidance has come.

In view of this, and with the objective being to help rather than to hinder, the following guides are suggested to medical societies in their relationship to voluntary health groups.

What Medical Societies Should Know About Each

Voluntary Health Agency

1. Its origin in the community
2. Its purpose and objectives
3. Its organizational structure
4. The percentage of all funds collected, spent for medical care, education, and research
5. The relationship between objectives and dollars spent, to the actual situation existing in the community relative to the disease or health problems concerned and to the need of research on a national basis.

What the Medical Society Could Expect of a

Voluntary Health Agency

1. Adequate medical representation on the governing body.
2. Continuous consultation relative to health problems and health program expenditures.
3. A regular review of the reports on the agency's health activities and financial status.
4. A rational approach in planning its program in terms of total community health needs and national research needs.

What the Voluntary Health Agency Should Expect of the Medical Society

1. Cooperation in evaluating the agency's objectives in terms of the community's health needs and the nation's research needs.
2. Active representation and participation in fulfilling objectives compatible with community needs.

O.U. Medical School To Be Featured on Television

The University of Oklahoma School of Medicine will be featured on a nationwide television program on Sunday, March 24. "Medical Horizons" is seen each Sunday at 3:30 P.M. on ABC network stations.

Appearing on the half hour broadcast will be: Stewart G. Wolf, M.D., head of the Department of Medicine; James F. Hammersten, M.D., Associate Professor of Medicine; and Charles Cathy, M.D., Resident in Medicine.

The topic which has been selected for the program is "Psychosomatic Medicine," which will depict patients as "partners in research."



HOWARD C. HOPPS, M.D., received a leather briefcase from the students of the Oklahoma School of Medicine as a token of appreciation for the work he has done and the contributions he has made for medicine as Chairman of the Department of Pathology of Oklahoma University School of Medicine. Making the presentation is Phil Stevenson, Alva, president of the student body. Doctor Hopps resigned his job on January 1, 1957, to accept a similar position with the University of Texas Medical branch at Galveston, Texas. Doctor Hopps, himself a graduate of the OU Medical School, served on the staff 12 years.

April 1 Is Deadline For Sears Loan Applications

The Sears-Roebuck Foundation announces that applications for financial assistance to physicians desiring to enter private practice are currently being processed for the first half of 1957. The deadline for receiving applications is April 1, with final determination on who will receive assistance no later than June 15. All applications are reviewed by a 17-member Medical Advisory Board who use the sole criteria for loan evaluation the medical need of the community and the financial need of the physician.

The Foundation makes an annual grant of \$125,000 to a revolving assistance fund for the purpose of making supplemental, 10 year, unsecured loans to physicians interested in establishing or improving facilities in suburban, rural or small town communities. These loans can be used for new building construction, remodeling, purchase of equipment, and for supplemental expenses connected with establishing a practice. The interest rate of these loans ranges from zero to six per cent depending on the rapidity of repayment.

This is an ideal time for graduating interns and residents who are interested in entering private practice but lack the necessary funds to apply since, if chosen, the funds will be available upon graduation in

State Health Department Has New Mental Health Film

In observation of National Mental Health Week, the State Department of Health has available its newest mental health film, "Anger at Work."

"Anger at Work" portrays mental hygiene problems common to industry and business which contribute to industrial accidents, absenteeism, or dismissal. This film on mental mechanisms depicts the chain reaction set off by frustrations or irritations with the destructive effect of displaced anger on the job or in the home. "Psychiatry for Everyday Living;" it is common sense, non technical, and only 20 minutes in length.

The film library of the State Health Department has over 150 different mental health films which have been widely distributed without charge within the state by the Division of Health Education.

July. A Foundation spokesman urged all interested physicians to apply immediately and not wait for the April 1 deadline to insure proper processing of applications. Applications may be obtained from county or state medical societies, AMA's Council on Medical Service, or from the Sears-Roebuck Foundation, 3333 W. Arthington, Chicago, Illinois.

County Medical Societies Report Officers for 1957

The following is a list of County Medical Society officers* who took office on January 1, 1957:

Atoka-Bryan Coal—William Arthur Hyde, M.D., Box 591, Durant; Seals L. Whitely, M.D., Box 591, Durant.

Beckham—William Leebron, M.D., Elk City; Bernard Horn, M.D., Elk City.

Blaine—A. K. Cox, M.D., Watonga; Virginia Curtin, M.D., Watonga.

Caddo—John Hine Ennis, M.D., Cyril; G. E. Haslam, M.D., Anadarko.

Canadian—Jack Enos, M.D., Yukon Clinic, Yukon; James P. Jobe, M.D., 203 S. Macomb, El Reno.

Carter-Love-Marshall—Clifford L. Lorentzen, M.D., 301 W. Broadway, Ardmore; John Adair, M.D., Bowman Bldg., Ardmore.

Cherokee-Adair—G. W. Buffington, M.D., 110 Delaware, Tahlequah; Burdge, F. Green, M.D., Stilwell.

Cleveland-McClain—F. C. Buffington, M.D., 502 S. Crawford, Norman; W. T. Stone, M.D., McCurdy Clinic, Purcell.

Comanche-Cotton—Charles Green, M.D., 1202 Arlington, Lawton; John T. Hicks, M.D., 605 Gore, Lawton.

Craig-Ottawa—Edward K. Witcher, M.D., Eastern Oklahoma Hospital, Vinita; Glen W. Cosby, M.D., 231 A. N. W., Miami.

Creek—C. E. Woodard, M.D., Drumright; D. L. McAllister, M.D., Bristow.

East Central: Muskogee-Sequoyah-Wagoner-McIntosh—Marvil Elkins, M.D., 428 E. Side Blvd., Muskogee; William Dandridge, M.D., Barnes Building, Muskogee.

Garfield-Kingfisher—Waldo B. Newell, Jr., M.D., 230 South Fifth, Enid; Roscoe Baker, M.D., 1223 West Maine, Enid.

Garvin—John M. Moore, M.D., 415 West Guy, Pauls Valley; Hugh H. Monroe, M.D., 814 N. Walnut, Pauls Valley.

Grant—R. W. Choice, M.D., Wakita; F. P. Robinson, M.D., Pond Creek.

Hughes-Seminole—W. E. Jones, M.D., Seminole; Jack A. Wood, M.D., Seminole.

Jackson—Earl W. Mabry, M.D., Altus; Cooper D. Ray, M.D., Altus.

Kay-Noble—E. C. Yeary, M.D., Medical Arts Bldg., Ponca City; Bill Simon, M.D., Perry.

Kiowa-Washita—Roy Anderson, M.D., Cordell; L. Gordon Livingston, Cordell.

LeFlore-Haskell—R. L. Winter, M.D., Poteau; K. G. Lowe, M.D., Poteau.

Lincoln—Darrell A. Seelig, M.D., Chandler; Carl H. Bailey, M.D., Stroud.

Logan—James S. Petty, M.D., 123 W. Broadway, Guthrie; J. R. Henke, M.D., 112 S. Wentz, Guthrie.

*The president's name follows the name of each society. The second name is the secretary-treasurer.

Northwestern: Beaver - Dewey - Ellis - Harper and Woodward—Walter H. Dersch, M.D., Shattuck; M. C. England, M.D., Woodward.

Murray—W. D. DeLay, M.D., Sulphur; Will G. Crandall, M.D., Sulphur.

Okfuskee—Andy S. Melton, M.D., Okemah; Everett L. Wiggins, M.D., Weleetka.

Oklahoma—Meredith M. Appleton, M.D., 610 NW 9 St., Oklahoma City; C. W. McClure, M.D., 415 NW 11, Oklahoma City.

Okmulgee—G. A. Kilpatrick, M.D., Henryetta; Cleve Beller, M.D., Okmulgee.

Payne-Pawnee—J. Douglas Green, M.D., 1030 E. Cherry, Cushing; George R. Smith, M.D., 1030 E. Cherry, Cushing.

Pittsburg—S. L. Norman, M.D., McAlester Clinic, McAlester; H. C. Wheeler, M.D., McAlester Clinic, McAlester.

Pontotoc—D. C. Ramsay, M.D., 100 E. 13, Ada; James Hohl, M.D., 100 E. 13, Ada.

Pottawatomie—J. D. Kethley, M.D., 624 N. Broadway, Shawnee; Clinton Gallaher, Box 949, Shawnee.

Rogers-Mayes—W. A. Howard, M.D., Chelsea; O. U. Holt, M.D., Claremore.

Stephens—Casper H. Smith, M.D., 815½ Walnut Avenue, Duncan; Robert Taylor, M.D., 1109 Walnut, Duncan.

Tulsa—G. R. Russell, M.D., 604 S. Cincinnati, Tulsa; Walter E. Brown, M.D., 2020 S. Xanthus, Tulsa.

Washington-Nowata—Fred Wallingford, M.D., 500 E. Frank Phillips, Bartlesville; John E. Scott, M.D., Medical Center, Bartlesville.

Woods-Alfalfa—Ed. L. Calhoon, M.D., Beaver; Kenneth L. Peach, M.D., Waynoka.

County Societies which have not reported their officers yet are: Custer, Grady, Greer, Jefferson, Osage, Texas-Cimarron, Tillman, and Tri-County.

Tax Booklet Now Available

A 38-page booklet entitled "Federal Income Tax Liability of Physicians" is now available from the A.M.A. Law Department.

The booklet covers many things of interest to physicians in preparing their '57 income tax returns: business entertainment expenses, deductions for expenses incurred in taking post-graduate courses, and deductions for maintaining an office at home.

The booklet is available to physicians in single copies without charge. Requests should be addressed to the Law Department, American Medical Association, 535 North Dearborn Street, Chicago 10, Illinois.

Tops in Entertainment to Highlight Annual Meeting

One of America's best known dance bands, Shep Fields and his Rippling Rhythms, has been engaged for the President's Inaugural Dinner Dance, a feature of the 51st Annual Meeting of the Oklahoma State Medical Association in Tulsa, May 6-8, 1957.

The popular orchestra will play for four hours of dancing at the Cimarron Ballroom on Tuesday, May 7th, following a social hour and dinner to be held at The Mayo. The dance portion of the event is being held at the Cimarron Ballroom, just one block from The Mayo, to relieve congestion on the dance floor and to prevent delays occasioned by clearing of tables, etc.

A capacity crowd is expected to attend the Dinner Dance, and tickets for the event go on sale March 15th. Members of the Oklahoma State Medical Association are urged to write in advance for tickets to the Executive Offices, Tulsa County Medical Society, B9 Medical Arts Building, Tulsa. The price of \$7.50 per person will include the social hour, dinner and Shep Fields Dance. Checks should be made payable to "Oklahoma State Medical Association."

Dr. Jack L. Richardson, Social Events Chairman of the 1957 Annual Meeting, last month announced details of two other convention social events:

1. A complimentary shore dinner on Monday evening, May 6th, tendered by the Blue Cross-Blue Shield Plans of Oklahoma at their Tulsa headquarters building. Convention visitors will enjoy fresh oysters, lobster tails and shrimp, along with a delicious assortment of salads, breads and desserts. There will be no program, and dinner will be served in an informal buffet style from 6:00 to 9:00 P.M. All doctors, wives and other convention guests are invited to attend. The dinner is being prepared and served by the Louisiane, one of Tulsa's finer seafood restaurants.

2. The Annual Golf Tournament and Dinner of the Oklahoma State Medical Association, sponsored by Pfizer Laboratories, on Wednesday, May 8th, at Tulsa Country Club. Golfing begins at 12:00 Noon with a complimentary social hour and dinner in the Clubhouse at 6:00 P.M. Pfizer Laboratories will be hosts for the entire event, and golfers



SHEP FIELDS and His Rippling Rhythms have been engaged for the President's Inaugural Dinner Dance, a feature of the 51st Annual Meeting of the Oklahoma State Medical Association to be held in Tulsa, May 6-8, 1957.

need bring only their golfing equipment. The affair is being held at the beautiful Tulsa Country Club, only five minutes from the downtown area. Members planning to attend are urged to register in advance at the General Registration Desk or by notifying any Pfizer representative. Dr. Robert Hall Johnson of Tulsa is in charge of the tournament.

A complete convention program is expected to be mailed to all Oklahoma doctors late in March.

An appeal for scientific exhibits for the 1957 Annual Meeting was made last month by Dr. R. W. Goen of Tulsa, Chairman of the Scientific Exhibit. Dr. Goen said space was still available for acceptable exhibits, and urged doctors and organizations to write for application blanks. The Exhibit Committee is seeking visual displays relating to interesting medical and surgical problems. Application blanks may be obtained by writing the Tulsa County Medical Society, B9 Medical Arts Building, Tulsa, Oklahoma.

THIS MONTH . . . In Washington

Washington, D.C.—With Congress now well along in its session, the list of health and medical bills totals several hundred. Some are minor—and few persons will be affected regardless what happens. Others just don't make much sense—and the committees, regardless of politics, can be trusted to let these measures die a peaceful death.

But there are scores of others—all important bills—that have some chance of passage, their prospects ranging from an outside possibility to a strong probability. At this stage they can be regarded as the raw material out of which will come the studies, the debates and the arguments in the months ahead.

One of the major health-medical issues is federal aid to medical, dental and osteopathy schools. On this the administration wants grants for construction and equipment only; some of the Democrats want to include money for operating expenses as well.

In number of bills introduced, the general subject of problems of the aging probably tops the list. And that is no surprise. For several years welfare workers, housing experts and recreational leaders, as well as physicians, have been looking for ways to help the retirement age population. Recently a special center was set up within the Institute of Health to devote its time exclusively to the aged. Outside government, voluntary groups have also been at work on the same subject.

Now the ideas developed by the years of discussion are coming to the surface in the form of legislation. Several of the bills would set up commissions, appointed either by the President or Congress. Another recommends that an existing House Committee make a study of the aging, similar to that suggested for the various commissions.

The commissions and committees would have one thing in common: They would further study and investigate in a field that many persons believe already has been plowed and replowed by investigators.

Several lawmakers want to get going right away. They would set up within the Department of Health, Education, and Welfare a

new Bureau of Older Persons, which immediately would start out to solve some of the problems through grants, demonstrations and more research.

Most controversial of the "help the aged" bills is one originally proposed by the then Social Security Administrator, Oscar Ewing, in 1951. It would allow 60 days a year of government-paid hospitalization every year for persons covered by OASI after they reach age 65. They could have this free service whether or not they were on retirement.

As in most Congresses, those who want to get the veterans more benefits and those who think they are getting too much already are coming to grips over new bills. Important in this group is a measure proposed by Chairman Teague (D., Texas) of the House Veterans Affairs Committee that would tighten up procedures under which veterans with non-service-connected conditions receive hospitalization. But at the same time there is pressure from other quarters for a lengthening of the "presumptive periods" for various diseases. Where the law now states that a certain disease or condition will be considered service-connected if diagnosed within one year after the veteran's discharge, these bills would make the period two or three years.

Many other bills aimed at liberalizing veterans' benefits in various ways also are awaiting committee action.

Social security and taxes are other popular fields for the legislators. As expected, several bills call for lowering the age at which a disabled person can start receiving his social security pension, now set at 50. Many measures would change the income tax laws to allow more credit for medical expenses, and one proposes allowing the taxpayer to deduct premiums for health insurance from his income tax itself.

Of major interest to physicians and most self-employed is the Jenkins-Keogh legislation, which would allow deferment of taxes on a portion of income put into retirement plans.

Again, a number of lawmakers want the federal government to take a more active part in control of narcotics, barbiturates and amphetamines and treatment of addicts.

One suggestion is to consider any shipment of barbiturates or amphetamines as a part of interstate commerce, on the theory that intrastate control is essential to interstate control. This and other bills also call for strict record-keeping and registration (physicians excepted from these provisions).

A plan introduced in the last session and offered again would give the President the right to assume control over the production, distribution and use of any drugs or biologicals "for use in the prevention and treatment of disease."

Other medical bills will of course be introduced as the session moves on; those discussed here already are assured of considerable attention.

At the State Capitol

The Oklahoma Legislature, at the time of going to press, has completed 28 legislative days with numerous bills in both branches of some interest to the medical profession.

In the Senate, Senate Bill 19, an act concerning psychiatric examinations of children prior to commitment to State training schools; Senate Bill 25 to establish an occupational and radiological health section in the State Health Department; Senate Bill 26 which refers to the confinement of the criminally insane in State penitentiary and the transfer of such patients; Senate Bill 184, a code for the adoption of persons; Senate Bill 185 establishing an offense for trafficking in children have been introduced by Senator Young of Haskell County in his capacity as Chairman of the Public Health and Welfare Committee.

Senate Bill 52 by Senator Wilson of Greer County would appropriate \$75,000 each year for special education of severely mentally retarded children.

Senate Bill 80 concerning physical and mental examinations for drivers licenses has been introduced by Miskovsky of Oklahoma County and Senate Bill 204 by Senator Payne pertaining to free choice of physician under Workmen's Compensation are all now pending in committees but with no hearing indicated.

In the House of Representatives, Representative J. D. McCarty, Oklahoma County, has introduced nine bills (H.B. 517-525) all pertaining to the enforcement of narcotic and regulated drugs. None, however, affect individual use of these preparations by physicians. All of these bills have passed the House of Representatives and are now on various committees of the Senate.

House Bill 684 by Representative Cunningham, Oklahoma County, would repeal present Oklahoma law with regard to advertising of visual care.

House Bill 736 by Andrews of Oklahoma County will establish a state hospital for care of epileptics.

House Bill 773 by Representative Carmichael of Beckham County is an amendment to the Chiropractic Act with regard to subjects that must be studied by chiropractors.

All of these mentioned, with the exception of the ones already referred to as passed by the House, are in Committees of the House of Representatives with no hearing indicated.

Appropriations to the Board of Higher Regents for the Medical School and its teaching hospital have, of course, been introduced and hearings on all appropriate measures are constantly being held with the final decisions depending upon ultimate outcome of the appropriations for teachers and highways.

At the present time there doesn't seem to be any legislation that would be objectionable or would materially affect the practice of medicine pending before the Legislature.

Hobby Show To Highlight 1957 Annual Meeting

A feature of the 1957 Annual Meeting in Tulsa will be a repetition of the popular Doctors Hobby Show. Physicians will display paintings, sculpture, and other hobbies in a special exhibit sponsored by the Auxiliary to the Oklahoma State Medical Association. Doctors wishing to participate are asked to communicate with Mrs. William R. R. Loney, 2440 East 26th Place, Tulsa.



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• Torpedoed on the Murmansk run—nearly frozen to death in an open boat—both legs lost below the knee—ex-Merchant Marines Michael McCormick and William Morris walked unaided in three weeks. They could look forward with certainty to leading a normal life again. To these men, as to thousands of other Hanger wearers, the phrase "Hanger is a symbol of help and hope" is a concrete truth proven by every day of their future lives.

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Articles published in *The Journal* of the
Oklahoma State Medical Association March
1932. Edited by John G. Matt, M.D.

Geriatrics

J. T. MARTIN, A.M., M.D., F.A.C.P.,
Oklahoma City

"Geriatrics, derived from Greek *Geron*, an old man, and *iatrike*, medical treatment; that branch of medical science which treats of the aged in their physiological and pathological relations; the specialty of the diseases of old age." (Stedman, 1928.)

"Medicine and its allied sciences have done much to mitigate woe, alleviate suffering and save life. Lest ruining pride fill our breasts, it is well to remember that all these accomplishments have been limited to, (1) a few common infections, (2) to disease of female pelvis and, (3) especially to diseases of children. The disease of post adult life have not receded in their death toll and the grief they cause has been assuaged but little. The profession by its efforts and the layman by financing the effort are now pushing forward in research in this field . . .

"It will be expected that medical science and medical practitioners will be in step with this advance. So perhaps a few passing thoughts on this subject will not be too boring. It is not my intention to advocate that a distinct specialty be set apart as it were from all the rest, but rather as a distinct study for all. Within a generation now active in the profession, pediatrics was conceived and born as a specialty and what a lusty youngster it has proved itself. So while history may repeat itself with Geriatrics, such pleas or prophecies are not german to the paper . . .

"Dr. Seidel's monograph 'Disease of Old Age' was really the beginning of American Geriatric literature. He states mistakes are made daily in the treatment of the aged and the normal mortality of advanced life is considerably increased as a result of hitherto neglected study of the peculiarities of the senile organism. Charcot's lectures of 1860, and Loomis' addenda to the same, was followed by Fothergill's—a layman's view—*Diseases of Sedentary and Advanced Life* (1885). Dr. I. L. Nascher, New York, asked a Vienna physician about physical care of a home for the aged which was under his care and received the reply, 'We deal with the aged inmates or the aged person just as the pediatricist deals with children,' and Dr. Nascher remarks that this gave him the basic principle of Geriatrics; viz: 'Senility is a physiologic

entity like childhood, not a pathologic state of maturity.' . . .

"The beauties of leisure, as distinguished from idleness, are appreciated more by the elderly and can by their fund of experiences be most valuable to civilization and can add to the happiness and longevity of older people.

"With the passing years habits change, though modes of life may not. Eating and drinking habits especially are modified. Moderation is the natural rule. Lessened metabolic demand lessens the appetite. Mild alcoholic beverages are well tolerated both as food and tonic. Remember the old saying, 'Wine is the milk of the aged.'

"Travel is to all a pleasure, but to those who have fought the battle, other battle fields are treasure houses to be enjoyed as only veterans may . . ."

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Acetophenetidin	gr. 2½
Acetylsalicylic Acid	gr. 3½

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COMING MEETINGS

UNIVERSITY OF OKLAHOMA SCHOOL OF MEDICINE

POSTGRADUATE COURSES—1956-1957 SHORT COURSE SERIES

3:30 to 8:30 p.m., Room 118, Medical School Afternoon and Evening Sessions

March 13—Anesthesiology for Part-Time Anesthetists

April 10—Problems in Infectious Disease

May 15—Chronic Pulmonary Disease

June 1—Surgical Emergencies

SELECTED PROBLEMS IN INTERNAL MEDICINE

November 26-30—Arranged by the American College of Physicians

UROLOGY SYMPOSIUM

March 15—C. B. Taylor Memorial Lecture to be held with this meeting.

TRAUMA SYMPOSIUM

April 5-6—Sponsored by Regional Committee on Trauma of American College of Surgeons

Guest Lecturer:

Daniel C. Riordan, M.D., New Orleans, La.

OKLAHOMA ASSOCIATION OF HOUSE STAFF PHYSICIANS

May 31—Two Guest Lecturers and presentation of original papers by members of the various House Staffs will highlight this program.

ARMY MEDICAL SERVICES SERIES

Army Medical Services will conduct courses in "Surgery in Acute Trauma," April 1-3, 1957, William Beaumont Army Hospital, Ft. Bliss, Texas.

May 6-8, 1957, Brooke Army Hospital, Brooke Army Medical Center, Ft. Sam Houston, Texas.

A O A SPRING LECTURESHIP MAY 1, 1957 4:00 P.M.

Medical School Auditorium

Speaker: Norman H. Horowitz, M.D., Professor of Biology at California Institute of Technology, Pasadena, California.

Subject: "Genes, Molecules, and Medicine." Everyone who is interested is invited.

POSTGRADUATE COURSE ON GASTROENTEROLOGY

MAY 13-15, 1957

University of Colorado School of Medicine
Denver, Colorado

Sponsored by the American Gastroenterological Association

May 13—Dinner Meeting with speaker Doctor Herman Taylor of London, England, speaking on the subject: "The Present Status of Medicine in England."

May 1—Six outstanding guest speakers participate in a panel discussion "The Peptic Ulcer Problem."

Further information can be obtained by writing to: The Office of Postgraduate Medical Education, University of Colorado Medical Center, 4200 East Ninth Avenue, Denver 20, Colorado.

Fifth Annual Interim Meeting of District VII of

THE AMERICAN COLLEGE OF OBSTETRICIANS AND GYNECOLOGISTS

APRIL 12-13, 1957

Statler-Hilton Hotel

Dallas, Texas

A two day program has been planned, consisting of scientific papers and treatment clinics and a king-size round table.

The College banquet with entertainment to follow will be held on Friday evening, April 12.

Wives are invited.

Doctor William P. Devereux, Dallas, is Chairman of the Local Arrangements Committee.

Post Graduate Symposium on the

BASIC SCIENCES RELATED TO ANESTHESIOLOGY

JUNE 10-14, 1957

Hotel Webster Hall

Pittsburgh, Pennsylvania

University of Pittsburgh School of Medicine Department will present the symposium in co-operation with the Departments of Anesthesiology of the St. Francis, Allegheny General, Mercy, Medical Center Hospitals.

Registration Fee—\$25.00

The course will be limited to 50 participants. Full particulars should be obtained from Chairman of the Committee on Graduate Medical Education, University of Pittsburgh School of Medicine, 3941 O'Hara Street, Pittsburgh 13, Pennsylvania.

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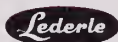
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Death

D. B. COLLINS, M.D.
1880-1957

D. B. Collins, M.D., died February 2, 1957, at his home in Waurika. He was 77.

Born January 28, 1880, in Alabama, he graduated from Vanderbilt in 1900. Doctor Collins moved to Waurika in 1917 where he practiced medicine until his retirement six years ago.

He was a Life Member of the Oklahoma State Medical Association and a member of the Association's "Fifty Year Club," the Methodist Church, and the Masonic Lodge.

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Phenylephrine Hydrochloride	10.0 mg.



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PHYSICIAN PLACEMENT

Anesthesia

Daniel B. Perry, Residence Quarters, Harlem Hospital, New York, N. Y., age 48, Meharry Medical College, 1948, interned at Harlem Hospital, New York and served residency in anesthesia there, veteran, available December, 1957.

General Practice

Louis Marshall Cuvillier, Jr., 1407 Woodside Parkway, Silver Spring, Maryland, age 44, married, George Washington University School of Medicine, 1938, interned at Garfield Memorial Hospital, Washington, D.C., one year residency in medicine and obstetrics at Norfolk General Hospital, Norfolk, Virginia. Veteran, available upon 90 day notice.

Orby L. Butcher, Jr., 3106 Alaska, Dallas, Texas, age 29, married, University of Oklahoma, 1955, now in surgical residency at VA Hospital in Dallas, Veteran. Available, July, 1957.

David L. Mossman, USAH, Orthopedic Department, Ft. Riley, Kansas, age 28, married, University of Vermont, 1954, available upon separation from service, December, 1957.

Robert R. Rupp, 1235 N. Lorraine, Wichita, Kansas, age 30, married, University of Oklahoma, 1956, internship at Wesley Hospital, Wichita, veteran, available, July 1, 1957.

Internal Medicine

James E. Morris, Jr., 1034 Second St., S.E., Moultrie, Georgia, age 26, married, University of Tennessee College of Medicine, 1953, one year internal medicine residency, now serving military obligation, available February, 1957.

Robert W. Datesman, 94 Oak Street, Westwood, Massachusetts, age 30, married, University of Pennsylvania, 1951, residency training at University of Minnesota Hospitals, and Boston Veteran Hospital, Veteran, available in July, 1957.

Joseph A. Ezzo, 3215 Nebraska, St. Louis 18, Missouri, age 32, married, St. Louis University, residency at St. Louis City Hospital and St. Louis University Hospitals, veteran, available, July 1, 1957.

Obstetrics-Gynecology

John P. Harrod, Jr., 932 E. 56th Street, Chicago 37, Illinois, age 33, married, University of Georgia, 1946, served residency at University Hospital, Augusta, Ga., Duval County Hospital, Jacksonville, Florida and at Chicago Lyons-In Hospital, Board certified, veteran, availability date unknown.

Bernard Martin Davis, Jr., 101 Turnbridge Rd., Baltimore 12, Maryland, age 31, married, Georgetown University, 1951, 3 years residency at University Hospital, Baltimore, veteran, available, July 1, 1957.

Pathology

Jess D. Green, Jr., 1765 South Victor, Tulsa, age 32, married, George Washington University, 1950, will finish four years pathology residency in January, 1957.

Pediatrics

Robert W. Mosely, 211 Adams Street, Galax, Virginia, age 32, married, Medical College of Virginia, 1948, residency at Walter Reed Army Hospital, Board eligible, interested in private practice or public health, veteran, available April, 1957.

Surgery

James F. Alexander, Charity Hospital, New Orleans, Louisiana, age 34, single, Ohio State, 1949, residencies at North Little Rock VA Hospital and Charity Hospital, veteran, available immediately.

Duane A. Barnett, 1636 N.E. 46th Street, Oklahoma City, age 30, married, University of Oklahoma, 1952, interned at Wesley Hospital, Oklahoma City, now in residency at Veteran's Administration Hospital, veteran, will be board eligible and available for practice July 1, 1957.

Aristides Cardona, 106 Sinis Rd., Syracuse, New York, age 30, married, State University of New York, 1951, Board eligible, wants additional residency, veteran, available, June, 1957.

Vernon L. Guynn, 2026 S. Second Ave., Maywood, Ill., age 32, married, University of Illinois, 1947, passed Part I of General Surgery Board, military obligation served, available January 1, 1957.

Alvin S. Natanson, 49 Kiernan Drive, Rantoul, Illinois, age 36, married, Tufts Medical College, 1949, residency training at Boston City Hospital, Diplomate of the American Board of Surgery, available upon separation from service, July, 1957.

Urology

John C. Brazos, 406 South Washington, Watertown, Wisconsin, age 36, married, University of Illinois, 1949, interned at Anckee County Hospital, St. Paul, Minnesota, residency at Milwaukee County Hospital, Milwaukee, Wisconsin. Veteran, available upon completion of residency, July 31, 1957.

Paul Lucian Livingston, 18340 Lake Chabot Road, Castro Valley, California, age 35, married, New York Medical College, 1946, served residencies at Orange Memorial Hospital, New Jersey and at Veterans' Administration Hospital, Long Beach, California, now Assistant Chief Urologist at V.A. Hospital, Board Qualified, veteran, available upon sixty days notice.

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Book Review

The Menninger Story. By Walker Winslow. Garden City, N. Y.: Doubleday and Company, 1956. 337 pp.

In the summer of 1908, a middle aged, devout Presbyterian and conscientious doctor journeyed to Rochester, Minnesota, to attend a meeting at the Mayo Clinic. He was so impressed that he stayed on a few days learning what the extensive laboratories had to teach him about his chief interest, metabolic medicine. Simultaneously there was born an idea which was nursed for many years, the establishment of a medical center in his home town, Topeka, Kansas. On his return the family morning prayers were longer than usual for a day. Since his three sons ranged from nine to fifteen at the time, his dream was nebulous indeed.

Doctor Charles Frederick Menninger had previously thought much about the relationship between emotions and physical illness and had written a paper or two about it. As the boys grew, they heard much about it and two of them became doctors and then psychiatrists. The older, Doctor Karl, rapidly became a prolific writer of papers and books, a pioneer psychoanalyst and educator and a restless and impatient advocate of changes in the field of psychiatric treatment and legal psychiatry. The younger, Doctor Will, became an administrator, psychoanalyst, educator, and fund raiser and later contributed some thoughtful books of his own. During the war, he became head of all psychiatry in the army, a general.

In the meantime there grew in Topeka, from 1921 on, a series of institutions: The Menninger Clinic, The Menninger Sanitarium, The Southard School (for children) and finally a consolidation of these (in 1941) The Menninger Foundation for Psychiatric Education and Research. In 1946 at Winter VA Hospital and the Clinic and Sanitarium, the Menninger School of Psychiatry was born. Later, in the midst of a scandal at the Topeka State Hospital, at the request of State officials, the school was enlarged to include training of residents there. At present about 135 doctors, a tenth of all all psy-

chiatric residents in America, are being trained. In addition there are training programs for psychiatric nurses and aids, psychologists and social workers. Many countries all over the world are represented in the student body.

In 1952, the corner stone of a new building, the latest of a series, was laid and the building was named in honor of the unassuming father of the institution, Doctor C. F. Menninger, then nearing a vigorous 90. He was expected to give a philosophical dissertation and, indeed, had one prepared. When the time came he laid it aside and said, "From the very beginning, God's hand has been guiding this, and it is fitting to invoke His blessing on what we are going to do. We believe that He put it into our hearts to build this hospital for the art of healing men." After a moment of silence he prayed.

"The Menninger Story" is the fascinating account of the background and development of the principles involved in the evolution of the outstanding psychiatric institution in the world today. There is a tendency to depreciate the role of the woman participants. Certainly no psychiatrist could believe that the mother of the boys as depicted could rear such dynamic, outgoing, and thoroughly effective sons.

While this book is not the definitive story that will be possible only after the decease of the principals, it is well worth reading by those interested in current medical history.—*Hugh M. Galbraith, M.D.*

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The School of Medicine

(Continued from Page 116)

man, it has received national recognition. His unique training as both radiologist and anatomist has enabled him to influence anatomists to include in their teaching the anatomy of living subjects. The members of the Anatomy Department have published 68 papers during the last five years in a broad field ranging through clinical, geriatric, radiological, and neurological anatomy to human anthropology, histochemistry, cytology, experimental embryology, carcinogenesis and skin pathology.

In addition to the teaching of anatomy to medical students and nurses, the department has extended its teaching to include advanced courses for graduate students. A new course in neuro-anatomy and neurophysiology for physical therapists has been inaugurated. Special postgraduate courses for the house staff, general practitioners and specialists have been given in surgical anatomy, neuro-anatomy, x-ray anatomy, anatomy of intern-

al medicine, anatomy for anesthesiologists, and recent advances in anatomy.

The very fine record of departmental accomplishment has attracted the interest of men from other institutions who would be outstanding additions to the faculty. Because of the salary scale, which is almost 50 per cent below that of competing institutions, considerable difficulty has been experienced in filling two vacancies in the department within the last few months.

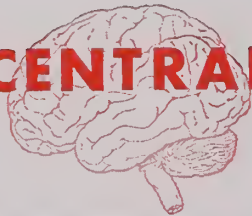
One or two additional faculty members are needed to meet the department's teaching load. The need for additional technicians and student assistants and for the realistic stipends for graduate students is similar in the Department of Anatomy to the other departments previously discussed. Modernization of the physical teaching aids is also an acute need. Although Doctor Lachman's estimate of the financial needs of his department seem to the author to be quite realistic and conservative, fulfillment of the basic needs would require an increase in the annual departmental budget of 130 per cent above the present allotment.

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EXEMPT NARCOTIC

Benzathine Penicillin G: Critical Evaluation of Its Potential Benefits

Approximately five years ago a new repository salt of penicillin G was first reported to the medical profession. While this antibiotic is more commonly known by its various trade names, such as Bicillin, Duapen, Neolin, or Permapen, its official generic name is benzathine penicillin G. All such marketed products are chemically identical, as are the tetracyclines which are identical despite five different trade names. Because of the unique properties of this compound in maintaining rather low but sustained blood and tissue concentrations of penicillin for upwards of four weeks following a single injection, according to the dosage used, the antibiotic has received considerable attention in the medical literature. It follows, then, that the agent has been used frequently and all too often because of scanty or incomplete medical evidence. Depending upon the amount administered and the weight of the patient, the usual injections prescribed cannot be expected to achieve concentrations higher than 0.015 to 0.06 units of penicillin per ml. of plasma in the majority of patients. This level is bactericidal for very few organisms and bacteriostatic for only a few others. Even with the treponemes of syphilis, which fall in the first group, the long-range clinical evaluation of therapy is incomplete. In the latter group, which includes the beta-hemolytic streptococcus, pneumococcus, and gonococcus, more information is available.

Care must be taken to distinguish the clinical results in patients treated with the *oral* vs. the *parenteral* forms of this antibiotic. Little similarity in clinical efficacy can be anticipated with two agents. The effective blood and tissue concentrations of penicillin following oral administration are inferior to other available oral preparations of either penicillin G or V. The possibly prolonged, but lower, concentrations of antimicrobial activity have no demonstrable advantage in therapy or in prophylaxis, when one considers the remultiplication cycles of the average bacterium (between 8 to 24 hours); hence the introduction of new orga-

nisms during an unprotected period would best be handled by agents that would achieve bactericidal concentrations. Furthermore, considering Eagle's careful observations, it is found that the maximum achievable concentrations of penicillin activity following either oral or parenteral therapy with benzathine penicillin G never remotely approach the level of ten times the sensitivity of the organism. Indeed, the maximum levels scarcely equal the sensitivities of most of the highly susceptible species. This suggests strongly that benzathine penicillin G is a poor therapeutic agent.

The recent report of the Committee on Prevention of Rheumatic Fever and Bacterial Endocarditis of the American Heart Association¹ has served to focus attention on some of the problems inherent in the use of benzathine penicillin G. Although it is clearly noted that alternate routes of prophylaxis for beta-hemolytic streptococcal infections, as a deterrent to recurrent or reactivated rheumatic fever, are available, there is no doubt about the statement that if benzathine penicillin G is used, it should be given *parenterally*. For prophylaxis of this one specific infection, there can be no argument with these recommendations. However, as often happens, the advantages of an antibiotic in *prophylaxis* and its value in *therapy* may be confused. Despite the recommendation of the Committee, many local pediatricians and internists, in particular, have found that a single injection of benzathine penicillin G is *not* adequate in the treatment of the acute streptococcal infections, if one accepts the fact that eradication of the beta-hemolytic streptococcus is the goal of therapy. It appears for the moment, at least, that in the early stages of such an infection the more potent forms of penicillin must be employed, and whether these be administered orally or parenterally, they must be agents that will produce bactericidal concentrations of the antibiotic. In this connection, it must be noted that the incidence of hypersensitivity reactions is far less with oral than parenterally administered penicillin forms.

One of the areas of "medical romance" to

all physicians has been the prevention of that most serious sequel of rheumatic fever and rheumatic heart disease, namely, subacute bacterial endocarditis. It may be emphatically and categorically stated here that there is at present *no* antibiotic that offers permanent and protective prophylaxis against endocarditis. It is to be recalled that the bacterium most often responsible for the disease is the *alpha* and not the *beta* hemolytic streptococcus. The alpha-streptococcus, or *Streptococcus viridans*, is not inhibited by the use of benzathine penicillin G. Many instances of confusion have been noted on this point, for physicians have often felt that endocarditis could not possibly have occurred, inasmuch as the patient was "receiving adequate prophylaxis for rheumatic fever." The intellectual discrepancy in this instance is due to a fog of confusion concerning the causative organism. In the recommendations of the Committee cited above, it is succinctly stated that only *therapeutic* dosages of bactericidal antibiotics given before and after special procedures will have any merit in the prophylaxis of subacute bacterial endocarditis. The attention of all physicians is directed to this publication.

In other diseases, such as gonorrhea and pneumococcal pneumonia, while the original enthusiasm that accompanies the introduction of any new drug was evident, subsequent and careful studies have shown that although benzathine penicillin G is highly useful in the *prophylaxis* of beta hemolytic streptococcal infections, of syphilis, and of gonorrhea, there is poor confirmation of its value as the sole *therapeutic* agent in any disease. Physicians must then think carefully about the nature of action of this chemotherapeutic agent before dispensing it glibly in the vain hope of covering a multitude of infectious sins. Benzathine penicillin G is indeed a highly valuable prophylactic agent in appropriate circumstances, but its efficacy as the sole *therapeutic* agent remains to be substantiated

T. H. H.

1. Committee on Prevention of Rheumatic Fever and Bacterial Endocarditis: Modern Concepts of Cardiovascular Disease, Am. Heart Assn. 25:365-369, Dec. 1956.

Proctalgia Fugax

This delicate term, which has a rude but well-known Anglo-Saxon counterpart, was coined by Thaysen in 1935. Translated, it

merely means a transitory pain in the rectum. This humble syndrome should be of interest to us physicians because we are reputed to be frequent victims of its excruciating embraces.

Recently a patient was seen who had the typical symptoms of intermittent attacks of rectal discomfort which usually began in the early morning hours as a dull cramping sensation which rapidly increased to an extreme degree of agonizing pain. This lasted for from five to forty-five minutes and then subsided leaving her exhausted and drenched with perspiration. Like so many others she felt that if she could expel gas or have a bowel movement the pain would be relieved. She also, quite typically, reported that she would throw her body into all sorts of contortions, squat on the floor and roll on the bed in her attempts to relieve the pain.

This exasperating affliction is much more common than the scanty literature about it would indicate. Reference to six textbooks, including Bacon's monumental *vade mecum* of our proctologic brethren, failed to yield a single citation regarding it.

Numerous causes have been suggested for proctalgia fugax. Among them are coitus; spasm of the "rectosigmoid sphincter;" spasm of the levator ani muscles; allergy, so-called "migraine of the rectum;" and "rectal crises" supposedly connoting a similarity to luetic visceral crises. It is impressive that most victims of this syndrome also suffer from varying degrees of psychoneurotic anxiety and tension states. It appears more frequently in women; seldom, if ever, in children.

About the only other frequently encountered condition to be differentiated is coccygodynia. This complaint is not nocturnal; usually appears when the patient is sitting, especially if in a slouched position; and radiates to the coccyx and buttocks. The pain of coccygodynia can almost always be reproduced if the examiner presses on the levator ani or pyriformis muscles during digital rectal examination.

The treatment of proctalgia fugax is simple but not always effective. Inhalation of the vapor from an amyl nitrite pearl frequently relieves the attack in a matter of seconds. Amphetamine inhalants also are reputed to be effective. A nitroglycerine tablet beneath the tongue is sometimes helpful.

Pococurantism

From the News-Letter of the American Academy of Pediatrics

Frontiers exist in medicine.

The nucleus of a major health problem, bodily injuries and traumatic deaths, is tersely described in the definition of pococurantism; a rarely used English word taken from the Italian language and derived from two Latin words: paucus-meaning little, and curare, to care. Pococurantism is a state of mind that cares little. It is an attitude of indifference, of disinterest, of apathy and of mental indolence.

The acceptance of the solution for a health problem, in the final analysis, is determined by the attitude of the people to that problem. The general public is not interested in preventing injuries and traumatic deaths. Metaphorically, pococurantism is the obstacle over which educational programs designed to prevent injuries stumble and fail. Time after time safety projects are initiated by experienced organizers with well developed and costly plans, and set into motion with appropriate publicity. Tragically, their momentum is slowed to an almost dead stop by this universal, invisible and underestimated human proclivity to care little.

Pococurantism is inherent in everyone. Its degree varies with individuals and in their reactions to different problems and situations. If one accepts the premise that the single basic biological factor in the motivation of behaviour is the necessity of meeting the bodily requirements of survival; hence, if one's behaviour leads to injury and death, pococurantism becomes pathological and should be classified as a disease.

The study of diseases, their causes, treatments and preventions has been accepted by the medical profession as their ethical responsibility. The purposes for the study of both diseases and injuries are threefold: to find a definitive cause, a specific therapy, and a way of prevention.

The pattern for the study of diseases has been fashioned by time. It is a story of medical leadership. Today as in the past, it begins with the clinical observations by the

physician of the symptoms and signs in his patient and the results of empirical methods of treatment. The pattern expands through experimentation in the laboratories, in animals and in man. In order to attain the maximum development of this pattern, high and uniform standards of education for doctors of medicine had to be established. The achievements of this system warrant its application to the exploration of unsolved health problems.

For the patient and his family there is no difference between a disease and an injury. However, a different pattern for the study of injuries and traumatic deaths has been molded by time. Leadership is divided. Today as in the past doctors treat, and more recently, safety groups have organized for prevention activities. The treatment of injuries is on a par with that for diseases. Although the medical profession has assumed the responsibility for therapy it leaves the study of both ends of the problem, cause and prevention, to lay individuals. The lay safety groups handicapped by lack of contact with injured patients have been trying to bridge the gap between causation and prevention. These groups have reached a conclusion logical to them that injuries are caused by lifeless objects. Preventive advice has been directed accordingly. The role of human behaviour as a factor has received little attention.

There is so much hidden drama in a broken bone from a slip on a scatter rug that its challenge passes over our heads. The doctor is content to apply a cast and the safety groups to recommend that an inanimate scatter rug be fastened down. If the prevention of the injury was merely to fasten the rug down, injuries and traumatic deaths would not be a major health problem. The solution is more complex than that.

The study of injuries and traumatic deaths, their causes, treatments and preventions is the moral responsibility of the medical profession.

Clinicians agree that patients are interested in preventing diseases but not injuries. What are the reasons for this difference in their attitude? People are afflicted with

pocourantism. Why? This is a subject for clinical research. The person best qualified to initiate the study of pocourantism is the physician. He sees the patient; uses forms of therapy that have been developed by the pattern fashioned by time for the study of diseases; and is in a strategic position to make pioneer observations of the human element in this perplexing problem. His finding may point a way for prevention.

Observations are not enough. The doctor must be vocal. He should discuss informally his observations and deductions as he does those of diseases with his colleagues in the corridors of the hospitals and at meetings. Eventually, the inertia on the part of the medical profession to this vexing question



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For
Protection***

In activities to fulfill its objectives "to maintain the honour and protect the interests of the medical profession" and "to assist all peoples of the world to attain the highest possible level of health," The World Medical Association has adopted an emblem to be used by civilian doctors, their ancillaries and civil defense installations.

Studies of the 4th Geneva Conventions and Conferences with representatives of the International Committee of the Red Cross revealed that the protection of the Red Cross Emblem did not and could not apply except to doctors, ancillaries and medical installations in military organizations. Hence in time of war, the civilian doctor, his assistants and civil defense units not under military control were without protection in carrying out their humanitarian responsibilities to the population.

will be overcome. The momentum will increase until the study of all phases of injuries has taken its rightful place alongside that of diseases in medical education, in practice, and at medical meetings.

Leadership will have been started in the study of bodily injuries and traumatic deaths as it is in diseases with the clinical observations by the physician. The pattern should expand through research. The findings should be given to the safety organizations so that their splendid facilities already in existence could be used for educational preventive programs.

Progress can be made in no other way.

—Robert H. Kotte, M.D.

A Central Repository for the medical credentials of doctors of the world has been developed through the joint efforts of the national member associations and the General Secretariat of The World Medical Association. Credentials or authenticated duplicates or copies will be processed by the member associations and the Secretariat of The World Medical Association. Application blanks and identification forms to accompany the credentials for deposit will be available through the national medical association of each country and its component parts.

The credentials deposited in the Central Repository will be safe-guarded by precautions of identification similar to those used in a bank deposit vault. The Repository will be located at a site and in a construction technically and scientifically estimated to provide ultimate protection to vital records in the event of destructive disasters.

Doctors wishing to provide the protection of a Repository for their records should apply to their national medical association for additional information and the necessary forms. Repository service will be financed by an annual charge to each doctor taking advantage of this service. It is currently estimated that the cost will be less than \$5.00 U. S. dollars yearly.

Scientific Articles

Abdominal Drainage: Review of

YATES' *Classic Monograph*--PRESENT CONCEPTS

ROBERT A. McLAUHLIN, M.D. and JOHN A. SCHILLING, M.D.

"There is probably no detail in modern surgical pathology that deserves more thorough comprehension, but which is less definitely understood by the average teacher, practitioner and student, than the nature of the reaction of the peritoneum to drainage." This sentence was written in 1905 by Dr. John L. Yates, whose monumental experimental work on abdominal drainage has had very little added to it to this day.¹

Historically, Hippocrates used drainage tubes in the treatment of empyema, and Cel-sus later used them to treat ascites. Until the middle of the nineteenth century, these were the main conditions treated with drainage. In 1887, Tait published his well-known dictum: "When in doubt, drain." The indications for drainage in 1905, according to Yates, were: (1) the presence of an established local or general infection of the peritoneum; (2) the probable subsequent development of such infectious processes; and (3) when, at the end of the operation, products remained that could not be spontaneously absorbed (i.e., blood clots). In addition, there were indications for packing or tamponade: (1) where there is oozing or hemorrhage otherwise uncontrollable; (2) areas that must be rendered extraperitoneal (abscess cavities, necrotic areas, etc.); (3) to exclude areas that may become dangerous (enteroanastomoses, choledochostomies, etc.); and (4) the obliteration of dead spaces.

The distinction between a drain and a pack was made in name only. One wonders how the peritoneum distinguished between whether it was being exteriorized or drained.

Experimentally, Graser in 1895 found that the more active the inflammation and the greater the endothelial destruction, the

THE AUTHORS

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John A. Schilling, M.D., graduated from Harvard School of Medicine in 1941 and specializes in surgery. In addition to holding membership in the Oklahoma County Medical Society, the Oklahoma State Medical Association, and the American Medical Association, Doctor Schilling is a member of the American Cancer Society, Fellow in the American College of Surgeons, American Association of Cancer Research, Society of Experimental Biology and Medicine, Internal Society of Surgery, University Surgical Society, American Surgical Association, Society for Experimental Pathology, Association of American Medical Colleges, New York Academy of Sciences. Doctor Schilling is certified by the American Board of Surgery. Formerly of Rochester, New York, he is now head of the Department of Surgery at the University of Oklahoma School of Medicine.

more fibrin was produced, i.e., adhesions. He found that there must always be some slight irritation to produce adhesions, i.e., exposure of serous surfaces to dry air for twenty minutes was sufficient. Elting and Calvert observed in dogs that adhesions from infection disappeared in three weeks, while those from severe mechanical abrasion resulted in organized connective tissue at five weeks. Von Ott's work in 1878 and Delbet's in 1889 on living animals proved that *general peritoneal drainage is a physiological impossibility*.

It was with these experimental facts in mind that Yates began his thirty-one experiments on: (1) reaction of normal peritoneum to drains; (2) reaction of the peri-

toneum in the presence of infection; and (3) observation on the resorption of adhesions.

The methods used in his experiments were uniform, meticulous and precise. Two types of drains were used, gauze and cigarette (i.e., gauze with protective outer sheath). The omentum was displaced upward, and the drains placed downward between the coils of intestines. Then the incisions were closed snugly about the drains. The duration of the experiment varied from four hours to eleven days. In certain cases carmine solution was injected through a subensiform incision, ante mortem, to establish if the drains were in continuity with the remainder of the abdominal cavity.

In Dr. Yates' first group of experiments on the reaction of normal peritoneum to drains, he found that at first there was a serous exudate associated with local hyperemia. After a few hours there began a visible deposit of fibrin. The character of the adhesions varied with the nature of the drain. The greater and more prolonged the irritation, the more intense the reaction and the firmer the adhesions. All serous surfaces reacted similarly.

Because Dr. Yates' first group of experiments were done under conditions of relative asepsis, a second series was undertaken to determine the influence of infection. A 24-hour bouillon culture of staphylococcus aureus of constant virulence was used. Dogs that developed general peritonitis in the presence of a foreign body showed the most intense inflammation nearest the encapsulating adhesions. Bacteriologic studies by culture showed that where foreign bodies were walled off in the presence of infection, the microorganisms persisted within the adhesions. Dr. Yates lastly concerned himself with the recognition of the factors in the disappearance of abdominal adhesions. He found that the main factors involved were the primary extent and density of the adhesions and the visceral movements subsequent to the operation.

He sums up the clinical significance of these experiments by advising local drainage of dangerous or potentially dangerous areas (by rendering them extraperitoneal) until all danger is eliminated. In doing this,

he advises that the drain be placed in such a manner that it will come in contact with the smallest area of serous surfaces (between omentum and parietes whenever possible); the patient should be at rest for the first twelve hours postoperatively; and advises the drain's removal as rapidly as conditions permit. With the drain removed and the wound well-healed, measures to stimulate intra-abdominal movements were recommended to cause disappearance of adhesions.

The modern concept of intraperitoneal drainage can perhaps best be illustrated by a table:

	Drain	No Drain	Removal
Cholecystectomy	84 %	16 %	4 or 5 day Grad. (60%)
*Duodenal Stump	17.7	82	7 day Grad. (60%)
Localized Intraperitoneal Abscess	98	2	7 day Grad. (90%)
Generalized Peritonitis	16.4	83.6	
Exposed Retroperitoneal tissue contaminated	59.7	40.3	Grad. (83%)
*If any insecurity of course, drainage instituted; therefore, actual percentage higher than recorded. ²			

These figures were obtained by Dr. Ely Lazarus in a survey of 62 leading surgeons, heads of departments of surgery throughout the United States, and, when categorized by section of the country, the results were very similar.

Surgeons must not forget that if intraperitoneal drainage from the G-I tract does occur, death is likely to result. Accurate anticipation of this condition is extremely important. In such a condition, provision for drainage must be considered, yet drains should not be used as a substitute for good surgical technique.

Technical factors that enter into the problem of abdominal drainage are: 1) two penrose drains for large tract; 2) drains properly placed—anchor with 6/0 plain catgut; 3) adequate exit through abdominal wall—admit two fingers; 4) locally accumulating fluid can well be removed with sump drains.³ 5) When drains have served their purpose, they should be removed. Those placed to provide an exit for fluid usually should be removed after one week. By this time any likely leakage should have occurred, and a tract will then be present to encourage pointing of any delayed drainage. 6) If placed

deep, they should be removed slowly, a few centimeters per day.⁴ 7) Finally, Yates' precepts may be reiterated.

Discussion

An adequate working concept of peritoneal drainage depends on, first, a knowledge of the anatomical areas, or spaces, of the peritoneal cavity. Of equal importance is a knowledge of the histological structure of the peritoneum and its communication to the vascular and lymphatic systems. Thirdly, an understanding of the foreign body response and its time relationships to the initial stimulus and biologic variations is obligatory. These concepts may be summarized as follows:

First, the major anatomical spaces are the right and left anterior and posterior subphrenic spaces, the subhepatic space, the right and left lumbar gutter areas, the pelvis, and the greater and lesser omental bursa.

Histologically, the peritoneum is composed of sheets of large polyhedral squamous-like mesothelial cells that cover thin layers of loose connective tissue, permitting the penetration or diffusion with great rapidity of large particles up to the size of red blood cells. It contains all the elements of connective tissue, which include fibroblasts, undifferentiated cells, macrophages, lymphoid, and mast cells, eosinophils, plasma cells, pigment cells, fat cells, and elastic and collagenous fibrils. It lies in close opposition to the lymphatics of the underlying visceral tissue.

Thirdly, the foreign body response is similar to that of other tissues. First, a completely inert, smooth foreign body will evoke little, if any, reaction. Or, if the foreign body particles are small enough, they may diffuse into lymphatic or vascular channels, or be engulfed by macrophages. Finally, large foreign bodies evoke a granulomatous reaction with first fibrin adhesions in a few hours, and later appearance after two to five days of granulation tissue, consisting of fibroblasts and capillaries. Finally collagen is laid down after ten to twenty days. The end result are fibrous adhesions and bands that may vary from light fibrinous tissue to dense collagenous bands. They may be sin-

gle, multiple, localized or generalized in the peritoneal cavity.

With a primary peritonitis or secondary rupture of an abscess that has been walled off, there is an immediate effusion in a few minutes throughout the entire peritoneal cavity. Within an hour or two there is a concentration of the offending effusion into the lumbar gutters, pelvis and subphrenic areas where often secondary abscesses occur. This centrifugal movement of the offending effusion continues for several days.

With these time relationships in mind, one can consider as a clinical example acute appendicitis. If the process is so acute that rupture occurs in a few hours, an immediate generalized peritonitis occurs, as fibrin adhesions have not yet formed. If, however, the process is less acute, the appendix is walled off by fibrinous adhesions of the appendix to the omentum and adjacent viscera. Under these circumstances, when the appendix ruptures after 24 to 36 hours a localized peritonitis will result, contained by the adjacent adherent viscera. Thirdly, if the process is much slower and the adjacent viscera become more densely adherent, a localized mass and abscess cavity may be the presenting physical finding. In children, the acute type of response is most common. In young adults, the less acute form predominates; and in the aged, the more chronic process is more frequent.

These concepts substantiate the dicta of Yates fifty years ago. Namely, it is ineffectual and impossible to drain the central portions of the peritoneal cavity. Secondly, drainage is necessary in the abscess pockets that are more usually located peripherally.

In addition, the use of drains centrally in the peritoneal cavity evokes a foreign body granulation response and subsequent adhesions, as outlined above, and in itself may create serious intestinal obstructive pathology.

Therefore, in summary, drains probably should never be used in the central peritoneal cavity. They should always be employed with specific indications with particular attention to the lateral and upper abdominal spaces. They may be used to establish a sinus tract for potential effusions, for ex-

ample, after a cholecystectomy or pancreatectomy. Care should be taken not to place a drain in direct contact with a suture line. A drain should not be used to substitute for good surgical technique, which, in itself, usually obviates the necessity of drains. Soft material that is smooth and relatively non-reactive should be employed with an adequate opening through the abdominal wall, preferably not through the incision, but through a separate stab wound. Gentleness should always be foremost in the mind of the surgeon when dealing with inflamed

viscera, whether drains are used or not, as dense adhesions result from both roughness and the use of drains. Golz demonstrated nearly a hundred years ago that shock rapidly accompanies intestinal trauma. Wound healing is delayed or blocked in inflamed, traumatized or devitalized tissue.

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METABOLIC MANAGEMENT *of* DEPRESSION

PATRICK S. NAGLE, M.D., F.A.C.S.

Molecular Chemical 'Lesions'

Molecular chemical "lesions" are coming into prominent focus in some fields of medicine. These intra-cellular molecular chemical phenomena first cause a disfunction of the particular cell or cells involved and this disfunction increases as the "lesion" progresses until ultimately clinical symptoms are in evidence. It is not within the scope of this paper to discuss structural changes that ultimately may and probably do take place in the various cells if these chemical molecular faults are not arrested and reversed. It is perfectly appropriate to speak of this intra-cellular phenomenon in a general way under the terms of intra-cellular metabolic disfunction and as being caused in some instances by intra-cellular anti-metabolic blocking agents such as "anti-hormones," "anti-vitamins," "false building blocks," and "deficiency states."

A review of recent basic science literature in the fields of enzymatic chemistry will reward the reader with an insight into the rich meaning of such terms as "anti-metabolite," "false building block," "template," "replication," "precursors of normal metabolites," "prosthetic" groups of co-enzymes, and many other such necessary terms that are commonly used in an effort to communicate these extraordinary complex and only recently uncovered phenomena. It would take pages to merely list the names of the many, many exceptionally fine basic scientists who

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have contributed parts to this vast jig saw puzzle which still has many many gaps in its pattern.

Chemical Lesion as the Common Denominator

All clinicians who have struggled for years with the blind spots in our knowledge and understanding of diagnosis, pathology, and treatment can see at once that it takes little or no imagination to sense the great importance of this fundamental concept of molecular intra-cellular chemical lesion as the common denominator of our future better understanding and appreciation of diseases. Pathological intra-cellular chemical processes promise a fundamental approach to the relief of many now apparently unrelated diseases and groups of diseases.

Each cell operates on the intrinsic energy it has stored within its self. Each and every parenchymal cell in each and every tissue, in each and every organ does not find its energy for function in the immediate utili-

zation of food stuffs ingested by the organism. The energy of the food stuffs when they have reached the blood stream in the form of carbo-hydrates, fatty acids and amino acids is transformed by the anaerobic and aerobic oxidative fall of hydrogen to oxygen to form water and in this process and from the energy derived from this fall of hydrogen to oxygen phosphorus (and possibly sulphur) is stored in the form of adenosine-tri-phosphate (and creatine-phosphate) in the mitochondria and possibly at other points in each cell. This phenomenon occurs through the agency of numerous intra-cellular dehydrogenase and oxidative enzymes many of which are in the mitochondria, each mitochondria being thought to have some hundreds of such enzymes within it. This then becomes the reserve storehouse of energy for all of the functioning of that cell and each cell and every cell in the body depending upon what its specific function is, in the specific tissue in which it is.

Numerous elements are precursors of this and other intra-cellular metabolic phenomena and are spoken of as substrates. Transportation of these substrates becomes a real consideration and there are several types and levels and magnitudes of such transportation of these innumerable substrates. For example, the blood plasma as it circulates through the body, of course, is a gross mechanical conduit of physical transport, a mechanism for the transportation of substrates and the distribution of them to the various areas of the body, the various organs of the body, the various tissue of those organs and ultimately to the interior of each and every cell of those organs. This level of transportation of necessary precursor substances or substrates is not at all difficult to visualize but the next level of transportation is more subtle and has only been recently demonstrated through the agency of electron microscopy and herewithin the cell we find pictured by the remarkable work of these fine scientists with the electron microscope, a demonstration of an intra-cellular vascular system which it may safely be presumed transports the essential precursor substances, the appropriate substrates essential to that particular cell from the periphery of the cell deep into the cell and into the endoplasmic particles of the cell and

to the surface of the mitochondria of the cell where such substrates are brought into immediate physical geographic relationship at a molecular level with the functioning and the specifically functioning enzymes of that cell.

Then, the third example of transportation comes into play and this is at the molecular level of enzyme transport of substrate into the cell and this is accomplished by the specific prosthetic group usually in the coenzyme, say the SH group of pantothenine in coenzyme A which functions to transport acetic acid in a molecular way into the cell and make cholesterol and all the steroid hormones of the adrenal cortex for example and of the ovarian tissues and of the sex hormones of the testicle. At this level we enter the fantastic field of electron transport and electron speeds and ionic changes, the critical importance of hydrogen ion, concentration of the electric charge on the poles of the molecule of the enzyme, and the picture really becomes fabulously interesting but very important to our purposes and insight.

The extraordinary complexity of these phenomena, the fabulous specificity of enzyme action and the extraordinary speed of enzyme transportation accomplishing this within one thousandth of a second, points immediately to the critical balance that must persist at all times for each and every cell in the body to continuously perform its predestined preformed inherited pattern. It is immediately apparent how subtle the influence may be that disrupts to some measure and denigrates the function of this cell, of any cell and possibly of all cells depending upon what antimetabolic phenomenon has come into play. If for instance cyanide is brought into play all the oxidative processes in all the cells of the body in which they are reached by that cyanide are to some complete or almost complete degree arrested. Lack of oxygen, lack of sugar and lack of the simplest of things denigrates instantly the enzymatic phenomena in each and every cell and if this persists for long serious disfunction results and if it persists for longer then the housekeeping of the cell fails and structural cellular failure occurs visible under the ordinary light microscope.

Although it seems almost certain that this concept will revolutionize the fields of

all degenerative diseases, allergy, cancer, and several types of so-called "Mental Disorder," it is not likely that it applies to character-disorders and it certainly does not apply and will not improve the paranoid. It is probably ineffective in the obsessive compulsive neurotic. These latter are inborn template situations in which the nerve net defines the behavior regardless of the health or inadequacy of the chemistry of its function. But there are several entities currently within the field of psychiatry which will be promptly removed once they are more thoroughly understood on a metabolic-chemical-basis and that is what this paper is about. The Depressions are due to intra-cellular chemical faults. These are a type of delirium, a chemical disfunction and may very appropriately be so considered, so treated and so named. Hence the name "Metabolic Delirium."

In the application of these concepts clinically it is appropriate to restrict ones self at the beginning to this one clinical entity namely in the usual parlance mild manic depressive personality depressed type.

Metabolic Delirium

"And, finally, evidence has been offered to show that manic-depressive psychosis is a constitutional and physio—chemical disorder that is begging for a solution in our research laboratories." This quotation is the last line of John D. Campbell, M.D.'s article on Mild Manic-Depressive Psychosis Depressive Type, published in the *Journal of Nervous and Mental Diseases*, 512 No. 3, September 12, 1950, and is characteristic of the fine piece of organization that he has done on this subject; of the soundness of his clinical appreciation for the problem which is evident throughout the article. It is a very, very worthwhile article. Anyone practicing medicine in any of many fields should thoroughly familiarize himself with this man's concepts of the symptoms that torment a large section of the American population for years, and drive them to doctors with twenty-nine (29) different complaints in twenty-nine different areas of the body which in no sense are organic in origin except that they are organic in origin at a molecular chemical intra-cellular level which has escaped us as a profession all these years. These are the symptoms that fill the doctor's offices across the land;

these are the patients who are written up in a recent January 1957, A.M.A. as of all things "problem patients." These are the patients who after having had for years what John Campbell appropriately classifies under the heading "Involuntary Nervous System Symptoms" then progress into the second category of symptoms which he describes as Emotional Symptoms or Disturbances and which he lists as follows: 1. Depressed spirits; 2. Anxiety; 3. Sensitiveness; 4. Crying spells; 5. Insomnia; 6. Phobias, compulsions and obsessive thoughts (fear of crowds, heights, knives, guns, closed places, germs, being left alone, etc.); 7. Irritability, nervousness, excitability; 8. Guilt feelings; 9. Remorseful feelings; 10. Feelings of unreality; 11. Impaired emotional reaction; 12. Fear of impending insanity; 13. Lack of confidence; 14. Feeling of desperation.

These are the patients who after enduring those symptoms for years and going from doctor to doctor and trying all forms of sedative medicines (veranol years ago; phenobarbitol and bromides more recently; and then all of the variations of the barbituates) are now subjected to this vast avalanche of tranquilizers, inhibitors and stimulators. These are people who are seen still with their autonomic and their "emotional" disturbances. The cells of their tissues and the cells of their nervous systems and the enzymes of their various neuro-chemical humoral mechanisms are not appropriately supported and are not functioning adequately and are giving rise to the most obscure, vague, difficult-to-describe, changing symptoms and disabilities and disfunctions. These same patients sometime later, as their basic difficulty is unrecognized, progressively develop the so-called "mental" symptoms of psycho-motor retardation, impaired concentration, impaired memory and ideas of reference. This is a most significant thing that John Campbell has brought up for consideration and study. This is the differential point in diagnosis and in treatment of these people who have what it is better to call "metabolic depression of neuro-physiological function." The truly psychotic is incurable. His condition is non-metabolic, but is the inborn, rigid, coldly hostile, unchanging status spoken of as paranoia.

The most classical symptom and one which the paranoid never has is a "Woosy Feeling in the Head." Another symptom is suspiciousness with the insight that it is suspiciousness and a warm naive disposition to test it for its accuracy whereas the paranoid's suspiciousness is not a suspiciousness but a "certainty;" there is no doubt in the mind of the paranoid. Ideas of and attempts at suicide in these people are common. Ideas of guilt and unworthiness are common. Morbid thoughts (of death, homicide, storms, catastrophes, hell, scenes of violence, etc.) are common. These all are the antithesis of paranoia. The paranoia never kills himself.

Indecision—this is most characteristic. Whereas in paranoia decisions are rigidly taken and never departed from.

Abnormal behavior (alcoholism, desertion, reckless driving, running away, family disputes) is common.

Lack of interest in usual pursuits and lack of sex interest are not unusual.

Religious thoughts (excessive reading of the Bible or over concern about sin) are frequent.

The above listed "mental" symptoms are cited by John Campbell. A careful study of them will be very rewarding to all physicians.

So now we have a category of people, a large group of people, who present themselves with a characteristic triad of symptoms depending upon their age and the degree of their chemical cellular depression and we have a knowledge that there is a lack of cellular energy underlying these symptoms. An inadequate deposition and storage of adenosine tri-phosphate in the cells of any of the tissues and all of the tissues will result in relative inadequate and hypo-function of these tissue cells and give rise in time to symptoms of vague and undescribable nature.

People who by their inheritance belong to this category of patients undoubtedly have an inherited enzyme system which is specific to their disease and which at more than one point in this chain of events is more susceptible to blocking by subtle agencies yet undetermined than are people of other constitutional types. It is certain the depressive is blocked at several or one of several

and possibly many different steps in this chain of events. The autonomic nervous system seems to be very susceptible to interruption in its normal full functioning in these people. The intestinal tract seems to be involved in some way. It is certain a blow in the solar plexus precipitates in some people more readily than in others an immediate depression. The feed back of unknown anti-metabolic substances endogenously generated within the intestinal tract has a place in our consideration as a possibility. Particularly do we think of the indol nucleus compounds. As scatol, indol and other substances that are formed in the terminal digestive metabolism of tryptophane in the large intestine through the agency of bacteria. And the corruptions of this protein digestion through the agencies of other bacteria such as B-Welchii.

The management of these cases is reasonably successful if they are accurately selected and the clinician is not confused by psycho-neurosis or malingering or organic disease. The original efforts to support these people is directed to the end of enhancing the intra-cellular restoration of normal values of adenosine-tri-phosphate through the administration of potassium-phosphate and the prosthetic group of co-enzyme A in the form of pantotheine. Magnesium, cobalt, iron, manganese, copper, zinc and other metals are employed. Amino acids and vitamins are useful. It is gratifying to see results in some cases in the form of resumption of new and normal interests in life, disappearance of gastric symptoms, recurrence of an appetite, and the ability to sleep, the reduction and disappearance of irritability, excitability and nervousness, improvement in clarity of thinking and decisiveness in business affairs, improvement in mood and the observation of the patient having enough energy to accept without frustration and anxiety the tedious problems incident to his everyday life and business, and improvement of his vision, hearing, and general sense of well being are rewarding to our efforts.

While this paper of Doctor Nagle's lacks the authenticity of reference to specific basic research in the field of cellular metabolism, his concept is an intriguing one and no doubt reflects hazily some of the thinking in this field. Editor.

Therapeutic Conference

TREATMENT *of the* ARTHRITIDES

W. K. ISHMAEL, M.D.; J. N. OWENS, JR., M.D.; R. W. PAYNE, M.D.

Doctor Payne: The rheumatic diseases present many interesting challenges to the physician. Accurate diagnosis is of course the 'sine qua non' of proper treatment though we won't have time to go into this matter today.

We are fortunate in having with us Dr. William Ishmael, Chief of the Arthritis Clinic at University Hospital, and Dr. J. N. Owens, Jr., who is both rheumatologist and pathologist.

More people have degenerative arthritis than any other type of arthritis, indeed everyone who is over 50 years of age presents evidence of this disease. Dr. Owens, will you tell us how you treat degenerative arthritis?

Doctor Owens: The primary consideration in the treatment of degenerative arthritis is directed toward the reduction of joint stresses. Proper use of the joints, particularly those bearing the brunt of body weight, and prevention of bony deterioration are primary considerations in the treatment of degenerative arthritis. Dietary measures are worthy of some attention. Certainly the diet should be of a high protein content with a liberal intake of calcium and phosphorous. For those individuals whose diet is substandard we supplement with a high protein cereal (Special Foods High Protein Cereal) and various forms of readily absorbable calcium, such as calcium lactate or calcium gluconate. We use low doses of sex steroids frequently in the treatment of degenerative joint disease and feel that mixtures of both androgens and estrogens are most useful for this purpose, regardless of the sex of the patient. Correction of postural strain is probably the most important consideration in the management of degenerative joint disease. Doctors Ishmael and Shorbe have compiled a pamph-

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let entitled "Care of the Back" which clearly illustrates common abnormalities of posture and simple remedial measures. I find this little book of considerable value in putting over the simple but very important elements of postural correction.

Doctor Payne: You have outlined the problem but have left us a little short of specific advice. Which steroid combinations would you use and in what doses? Do you inject involved joints with insoluble glucocorticoids? Do you use analgesics and tranquilizers in these individuals?

Doctor Owens: A combination of diethylstilbestrol, .25 mg., and methylestosterone, 5 mg., known as Tylosterone^R given orally is representative of the type of mixed steroids that we have found useful. Ordinarily one would prescribe one tablet daily of this preparation for the male and every other day for the female. There are many similar preparations on the market.

Hydrocortisone acetate and hydrocortisone-butyl acetate are of considerable value injected intra-articularly or into subcutaneous areas of reflex pain. The addition of 1 per cent Cyclaine^R to the glucocorticoid has also been helpful.

The salicylates are still our most commonly used analgesics in these patients and various of the tranquilizers may be of some value

for reducing the tension which commonly accompanies this disease.

Doctor Payne: Dr. Hellbaum has recently 'spiked' mixed steroids with small amounts of dessicated thyroid and has some convincing evidence that this addition is frequently of value in the older patients with degenerative joint disease. The beneficial effect of these steroids is usually manifested as a feeling of increased strength, muscle relaxation and generally improved morale rather than any obvious physical transformation.

The luxury of drugs that relax muscles, cushion the brain and relieve pain are nobly put to test in the escape from the real discomforts of this disease. Dr. Ishmael, do you have anything to add in the treatment of this most common form of arthritis?

Doctor Ishmael: The management of patients with degenerative arthritis is largely an office procedure. A sizeable proportion of the patients coming to the general practitioner have degenerative arthritis. As pointed out by Dr. Owens, it is a disease of stress, pain, and soreness occurring in a joint which has been driven past its strength or endurance. To illustrate the meaning of this to patients I point out the similarity between this type of reaction and a blister in the hand following the use of a shovel—or the sore shoulder of a ball pitcher who has pitched too much. In outlining treatment to the patient, I believe it is important for him to understand the purpose of the therapy. To accomplish this, compare his sore joint to the blister on the hand, and point out that there are three factors contributing to the occurrence of the blister: 1) How heavy is the shovel, or what is the stress load? 2) How tough are the hands to withstand wear and tear, or is there any factor present in the patients's musculoskeletal system which has rendered it susceptible to stress? 3) Finally, how willing is the patient to put down the shovel when he has had enough; is the patient willing to quit when he is tired, or does he continue to drive himself beyond his endurance?

Doctor Owens: Such things as reduction of fatigue, reduction in joint trauma, improved morale, and protection from the elements are certainly of great value in the management of this disease.

Simply reducing the body weight of a corpulent patient with degenerative joint symptoms may be of considerable benefit.

Doctor Payne: I can assure you that this disease requires real 'doctoring,' not just treatment.

We don't see many patients with gout at University Hospitals, yet Dr. Ishmael sees a good many patients with this metabolic disorder in his private practice. How do you treat this disease, Dr. Ishmael?

Doctor Ishmael: During the past 20 years, with the exception of during the war, there have been three patients with gout in the Arthritis Clinic of the University Hospital. In private practice during this period of time we have had over three hundred patients with this disease. This indicates possibly that persons with gout rarely find themselves in the position of having to go to a charity clinic. The purpose of mentioning this is to point out that patients with this disease are usually rugged individuals and their management depends a great deal upon understanding their personality and getting across to them the necessity of following a lifetime regime in the management of their disease. Possibly the most important thing in the management of gout is to recognize the disease when it occurs. The isolated, severe attack seen in the pretophaceous stage is not too difficult to recognize. The chronic, deforming changes seen in tophaceous gout many times offer a challenge. It is most important, however, to bear in mind that gout is always a possibility and must be considered. The serum uric acid level is helpful in establishing the diagnosis. Examination of biopsy material from tophi many times is needed, however, for definite diagnosis.

The management of gout has changed a great deal in the past six or seven years, largely because of the introduction of Probenecid (Benemid[®]). This drug alters the reabsorption of uric acid by the kidney tubule and allows excretion of this substance. This in turn reduces the miscible pool of uric acid in the body and eventually lowers the serum uric acid concentration. A marked reduction of the articular phenomena follows. In the past the 'sheet anchors' of treatment have been the reduction of purine foods in the diet and the control of articular attacks

as they occurred. It is now known that regulation of the dietary intake of purines is relatively useless, as the body is capable of manufacturing its own uric acid, though some restriction of exogenous sources is desirable. Generally the diet recommended at the present time is a balanced diet. Excess fats are usually restricted as most of these patients are overweight, and for the further reason that ketosis (fatty acidosis) pre-disposes to gouty attacks. During the past two or three years Lockie and Talbot have advocated the use of small amounts of colchicine (1/100 gr.) twice daily, along with Benemid^R (.5 gram) twice daily. We have been following this regime for the past year and have found fewer gouty attacks with this management.

As uric acid stones in the urinary tract occasionally complicate gout, it is sometimes necessary to use alkalis in the management, there being less tendency for sodium urate precipitation in an alkaline medium. Persons with gout should avoid trauma to their joints, exposure, fatigue, and exhaustion—as these occasionally precipitate attacks. Injections of liver extract, heavy metals, and Vitamin B complex many times provoke attacks and should be avoided. Surgery, major or minor, may provoke an attack and before any elective surgery is contemplated the uric acid should be brought down to normal levels.

Initial doses of Benemid^R should be small; then gradually built up, as an attack of gout may be precipitated by sudden mobilization of the urates.

Doctor Payne: What about the use of Butazolidin^R and salicylates in gout?

Doctor Owens: Acute attacks of gout are often helped by the use of Butazolidin^R. Occasionally it has been used in doses of 800 mgs. for the first 24 hours then reduced to 300 mgs. for two or three days, and often stopped altogether after this. Very rarely is it necessary to use intra-articular injections of hydrocortisone in an acute gouty joint. About two years ago we were told that with Benemid^R the restriction of salicylates was necessary, although several papers in the literature at the present time show that it is not absolutely necessary. However, it has been experimentally shown

that salicylates do tend to block the uricosuric properties of Benemid^R, so one is justified in keeping these patients salicylate-free during this treatment. Benemid^R is not to be used as a treatment for acute gout, but rather as a prevention against future attacks, and usually once a patient is regulated on Benemid^R therapy the attacks become shorter and farther apart.

Doctor Payne: Certainly Benemid^R is effective in the long term management of gout. Though not very dramatic, it does cause an increase in uric acid excretion. One gram daily given orally causes an increased uric acid excretion of 30 to 40 per cent and if continued over a prolonged period, substantial decreases in serum uric acid will result. Troublesome side effects of the drug are rare.

Rheumatoid arthritis includes several variants; namely peripheral rheumatoid arthritis, rheumatoid spondylitis, and juvenile rheumatoid arthritis. Doctor Ishmael, would you begin the discussion of this type of arthritis?

Doctor Ishmael: Though rheumatoid arthritis is potentially a very serious disease it does have a tendency for natural remission. The therapy of patients with rheumatoid arthritis is predicated on aiding the development of a natural remission.

Analgesia in patients with rheumatoid arthritis is important as the presence of pain prevents rest and sleep, which serves to aggravate or perpetuate the disease. Salicylates are most suitable for this purpose. Never use a narcotic, not even once!

In addition to their analgesic effect salicylates exert a mild anti-inflammatory or anti-phlogistic effect most prominent in the treatment of rheumatic fever. Indeed, an unusually good response to salicylates would raise the suspicion of rheumatic fever.

Phenylbutazone (Butazolidin^R), an anti-rheumatic agent introduced some six or seven years ago, has proved very valuable in the management of rheumatoid reactions, particularly in rheumatoid spondylitis. In moderate doses (200 mg. daily) phenylbutazone is generally well tolerated, comparing favorably with aspirin in this respect. We

limit the dose to 300 mgs. daily in most patients and give it usually on a p.r.n. basis, thus with improvement the dosage is reduced. Should intolerance appear, the drug is discontinued.

It is my personal feeling that if a patient does not respond to phenylbutazone in the first five or six days, it should be discontinued. It is a mistake to raise the dose in the hopes of getting a response as it is in these instances that untoward reactions result. As far as I am personally concerned, phenylbutazone, at this time, is the best anti-phlogistic agent available for use in rheumatoid arthritis—when it is effective.

Doctor Payne: Doses of Butazolidin^R in the realm of 200 mg. daily are generally well tolerated for long periods of time and will frequently produce a satisfactory anti-rheumatic effect. However, one must continue treatment for several weeks before the full effect of the drug at this dosage is clinically apparent. Larger doses produce a more striking therapeutic response but these patients must be watched closely for evidence of untoward effect.

Doctor Ishmael: The glucocorticoids have been used quite widely since their introduction in 1949. They have a profound anti-inflammation effect. It has been our experience, however, that patients who remain on these substances over a period of time tend "to get into trouble." By getting into trouble I mean that after an initial good response they begin to lose some of their improvement. The dosage is subsequently increased to the point where hypercortisonism develops. It is my feeling that further persistence in the use of these agents may lead to dissemination of the collagen disease manifested by angiitis, chills, fever, serious parenchymal damage, and other serious collagen reactions. Any attempt at withdrawal of the corticosteroid at this point sharply increases these changes. In the past four months we have seen six patients die under these circumstances. In all of these patients, positive lupus preps were found.

In order to obtain a broader aspect regarding the use of corticosteroids in rheumatoid arthritis, I recently had occasion to circularize various rheumatologists over the

country regarding their experience with these agents. I do not have the specific data from these questionnaires but I do recall that over half of the rheumatologists questioned do not use the corticosteroids in the management of chronic rheumatoid arthritis. Their reasons, by and large, were the same as ours, namely that they present a serious withdrawal problem and serious chronic toxicity.

Regional injections of hydrocortisone are more widely used, and we find them quite helpful in patients in whom the disease is restricted to one or two joints.

Prednisone and prednisolone, in our hands, have proved more difficult to control than cortisone. This possibly results from the fact that cortisone tends to produce edema and other obvious changes discouraging its further use by the patient; whereas prednisone, lacking in these immediate side effects, is carried to the more serious degrees of hypercortisonism.

ACTH used intramuscularly has certain advantages and, of course, disadvantages. Whereas injection therapy is difficult and expensive, it at least tends to discourage overuse by the average patient. We have found less withdrawal problems, particularly in rheumatoids with positive lupus preps than we have from the cortisone compounds. The use of ACTH intravenously has proved to have specific advantages in my experience. However, in the rheumatologists circularized, it was not used very extensively. I find it to be quite helpful in the control of severe rheumatoid reactions, and many times life saving in the severe withdrawal reactions from cortisone. We use relatively small amounts, 10 to 15 units, given in 500 c.c. of glucose in water given by slow drip over a four or five hour period. Apparently, the dose of the ACTH used is not as important as the period of time used in administering it. By that I mean, 10 units given over a five hour period is more effective than 30 units given in a five minute period. Ordinarily, such intravenous infusions are repeated on a p.r.n. basis, varying from twenty-four hours to once or twice weekly, averaging two or three times weekly. As a general thing, we try to avoid daily use of ACTH.

Gold salts have now been used in the treatment of rheumatoid arthritis for over twenty years. Reports vary as to its effectiveness. In our experience, thirty-five to forty per cent of rheumatoids respond sufficiently well to warrant its continued use. At one time gold was considered to be quite dangerous, producing a mortality rate of two or three per cent. This was because the colloidal salts were used, such as gold chloride, and the dosage employed was too high. At the present time, the noncolloidal salts are used; very small doses, around 10 mgs., are given initially and gradually built up to 25 mg. to 50 mg. doses, repeated once or twice weekly, depending upon the patient's response. The length of time over which gold should be used varies considerably. It has been our practice that with complete remission of symptoms, it can be discontinued and resumed later if necessary. Others feel that it should be continued for several months after a remission develops. Gold should be discontinued should toxic signs appear. These usually appear as dermatitis, chills, fever, hematuria, or other signs of kidney reaction.

Sex steroids have no specific antiarthritic action. However, they frequently are helpful when osteoporosis exists or in patients under prolonged corticosteroid therapy, again for the prevention of osteoporosis. Experimentally, we have given testosterone in large doses, 100 mgs. to 300 mgs., weekly and, in a substantial number of patients, have obtained temporary remission. The undesirable hormonal effects, at these doses, however, prevent its protracted use, even in males.

Hematinics are used frequently in rheumatoid arthritis, as most patients with this disease are anemic. However, these agents are seldom of value in this situation. Whole blood transfusions are indicated in those patients with severe anemia and in addition, frequently produce an excellent general therapeutic response in patients with rheumatoid arthritis.

Sedatives, hypnotics, tranquilizers, and skeletal muscle relaxants have been very helpful to me in managing arthritics. The recently introduced substances such as mepro-

bamate and the promazine compounds have proved to be much more valuable than the barbiturates used in the past. The most important action of these "tranquilizers" is to allow the patient to sleep when his sleep is disturbed by nervous tension. They also are helpful where pain is a problem. As pointed out in regards to the use of analgesics, nothing is more aggravating to arthritics than the loss of sleep. I have never liked barbiturates for the treatment of arthritis as they tend to depress the patient and tolerance is built up rapidly. Occasional use of a barbiturate as a soporific, however, is indicated. Mephenesin has not been of any value in my hands.

I hesitate to discuss antibiotics at this time because I do not know exactly where I do stand. I am sure that I use more antibiotics now than in the past. I use them just as in the control of rheumatic fever. As a rule, this would be applied to the patient with rheumatoid arthritis who dates his disease from a known infection and who has exacerbations of the disease following subsequent infections. This type of therapy is discontinued if it proves to be ineffective. Should the patient respond well to their use, I think they should be used for all the good they will do. I have observed many remissions during the last ten years from the use of antibiotics.

Chloroquine diphosphate (Aralen[®]) and Placquenil[®] have proven to be very helpful in a certain group of rheumatoids. These two substances seem to act a great deal alike, as far as the collagen disease is concerned, though Placquenil[®] is frequently better tolerated than Aralen[®]. Signs of intolerance usually include nausea and vomiting, nervousness or skin rash. It is true that only a relatively small percentage (10 to 15 per cent) of patients with rheumatoid arthritis respond favorably to these substances. However, it should be pointed out that when they do produce remission, these drugs can be used over indefinite periods of time without fear of an accumulative type of reaction. It is impossible to predict in advance which patient will respond beneficially, though it is my personal feeling that patients with a positive lupus cell phenomena are more likely to be suitable can-

didates. These patients tend to have more than average multiple system involvement, to have febrile episodes, to exhibit excessive malaise and to show intense reaction in the joints involved.

Doctor Payne: The commonly seen reflex shoulder dystrophies, though usually self-limiting, present a rather urgent appeal for relief. Doctor Owens, what are your thoughts on this matter?

Doctor Owens: One of the most encouraging things in the treatment of reflex shoulder dystrophies is the fact that we have cortisone and hydrocortisone which can be injected with small amounts of Novocaine^R or Cyclaine^R to produce dramatic relief frequently lasting for quite some time. One should explore for reflex points over the infrascapular and suprascapular areas as well as over the trapezius muscle, and these painful nodules and trigger points should be injected.

Doctor Payne: The principal problems in the treatment of reflex shoulder dystrophies are relief of pain and relaxation of muscle spasm. Meprobamate in doses of 400 mg. orally every 6 hours usually performs the latter function satisfactorily. If an analgesic is given along with meprobamate there is generally considerable potentiation of effect. Aspirin in 300-600 mg. doses usually suffices for this purpose. A non-addicting analog of meperidine (called Wyeth-401) shows more pronounced reinforcement of meprobamate effect for the relief of reflex shoulder discomfort and disability. W-401 appears to exhibit no addiction liability and practically no toxicity in the doses used for this purpose (25-50 mg.), though it is generally a comparatively weak analgesic.

Correction of postural defects and injection of reflex points certainly call for a full share of attention in the treatment of these shoulder-hand problems.

Prophylaxis against rheumatic fever has been instrumental in reducing the incidence of this disease.

Doctor Owens: Prophylaxis against Group A hemolytic streptococci is extremely important in the control of rheumatic fever. Penicillin is far and away the best antibi-

otic for this purpose and should be given as benzathine penicillin (Bicillin^R) 1.2 million units I.M. every month. This dose is of no treatment value as serum levels of penicillin only sufficiently high to prevent infection with extremely sensitive organisms are reached.

Penicillin V or Bicillin^R orally given twice daily is also of prophylactic value but is considerably more expensive than the repository form. Much higher serum levels of penicillin must be produced for the treatment of streptococci infections.

A poor second choice for prophylaxis of rheumatic fever is Gantrisin^R, in a dose of .5 gm. twice daily. This agent is probably of no value in the treatment of rheumatic fever.

We have become increasingly aware of the necessity for eradicating the streptococci from those individuals in close contact with the patient. Thus, we frequently take nasopharyngeal cultures from all members of the immediate family and treat these strep. carriers.

Prophylaxis against strep. infection should be continued into young adulthood with particular emphasis on protection during the spring and fall and prompt attention to any upper respiratory infection.

Doctor Ishmael: The question of whether corticosteroids and salicylates should be used in the treatment of rheumatic fever, I believe, is an important one. It is my feeling that salicylates in adequate doses should be used. Should the patient fail to respond satisfactorily or completely, then I think corticosteroids should be employed. To me, one of the most difficult aspects of the management of rheumatic fever is recognizing the disease. This is particularly true when it occurs in adults. I find serial ASO titer determinations to be helpful; ECG tracings are, of course, helpful; and as mentioned previously, if the patient responds quite well to salicylates this would be highly suggestive of the presence of rheumatic fever.

Doctor Payne: I know there are several good studies which indicate that glucocorticoids possess no advantage over salicylates in the long term management of rheumatic fever. However, there are equally respon-

sible articles which report favorable results with large doses of glucocorticoids for short periods of time in children with rheumatic fever; doses comparable to 200 and 300 mg. of cortisone a day for periods of 7 to 14 days. The rationale behind such treatment is that almost all children with rheumatic fever have rheumatic carditis—with a high incidence of resultant heart damage. The side-effects of the glucocorticoid given over this short period of time are not particularly troublesome and I feel that everything that we can offer for the possible prevention or decrease in residual carditis should be used. I am continuously struck down, however, for this attitude and don't expect much sympathy. Certainly salicylates, bed rest and antibiotics are the basic elements of rheumatic fever treatment. Please avoid aspirin in the treatment of very small children as it is a common cause of poisoning in such individuals; rather, use another form of salicylate.

Disseminated lupus erythematosus may present a mandatory necessity for glucocorticoids in large doses (200 or 300 mg. cortisone equivalent per day) as a life saving procedure. As a contrast, in the treatment of periarteritis nodosa there is evidence that glucocorticoids may backfire violently. Deaths have been reported in this disease from rupture of involved vessels following glucocorticoid administration, though again as a matter of life and death I doubt if anyone would criticize the use of the glucocorticoids in these patients. Dermatomyositis may be immediately benefitted by glucocorticoids but one would prefer not to use them in this type of situation and would rather prefer to use large doses of androgens. Scleroderma is probably more refractory to treatment than any of the collagen diseases. We have recently treated scleroderma with relaxin, following the example of a group in Florida. We have tried this drug for only short periods of time in four patients with some encouragement. The excellent results that have been reported have been brought about with combinations of relaxin with estrogens. The chelating agents have also been used in both dermatomyositis and scleroderma to rid the tissues of the excess calcium that occurs in these diseases. I am not

sure that striking results are to be expected from this technique though such have been described.

Doctor Ishmael: I would like to take exception with Doctor Payne on the use of cortisone in disseminated lupus erythematosus. I dislike using this type of therapy, as the withdrawal problem is always there. In my limited experience, the average patient with lupus on cortisone quickly develops hypercortisonism, and the drug must be discontinued sooner or later. I much prefer the use of ACTH and the antimalarials such as Aralen^R or Placquenil^R when they are effective.

I should also like to point out, as in rheumatoid arthritis, there is always the possibility of natural remission of this disease. I like to pitch my treatment toward this possibility. In my experience, slow intravenous ACTH drip therapy is the treatment of choice in controlling the severe panangiitic reactions that occur in disseminated lupus erythematosus. We have a small group of patients who have taken intramuscular ACTH over a four or five year period with satisfactory control of their disease.

Doctor Payne: I would like to weakly defend myself in that I reserve glucocorticoids as a life saving measure in the treatment of disseminated lupus erythematosus. The young females, from 20 to 25 years of age, who develop this disease have a life expectation of about four to six months and it characteristically is a rapidly fatal disease in this type of individual. Older individuals with disseminated L.E., who fortunately are seen more commonly, cause no disagreement between Doctor Ishmael and myself. Certainly when glucocorticoids are stopped then "all hell" may be expected to break loose.

I personally don't feel that there is any fundamental difference between the ultimate action of ACTH and cortisone. Both preparations however produce fluid retention which can be avoided by substituting prednisone or prednisolone.

Doctors Ishmael, Owens and I are at swords' points on the whole matter of glucocorticoids, so to avoid bloodshed I will thank them kindly for a most pleasant discussion.

Special Report

Statistics in this Special Report have been prepared by the Washington Office of the American Medical Association

The Federal **MEDICAL-WELFARE** *Picture*

Cost of Medical Care in the U.S.

When the various parts that go into the Nation's health bill each year are added up, the total is staggering. Estimates of private and public spending include the cost of everything from patent medicine and toothpaste to surgeons' fees. Private care for the country in 1955 was placed at \$11.2 billion, while public care (federal, state and local) was estimated at \$3.9 billion. The following figures for private care costs are for 1955:

\$3.4 billion for physicians' charges.

\$3.7 billion for hospital charges.

\$2.3 billion for charges for drugs and appliances.

\$1.8 billion for other charges, including nursing, etc.

Health and Medical Resources

The medical "plant" that provides the country with the finest care of any nation is equally impressive when viewed statistically. In one area, that of medical school graduates, bare statistics fail to tell the whole story. They do not, for instance, reflect the increased utilization of physicians' skills and the advance of medical knowledge in treatment of patients.

225,579 physicians in U.S. in January, 1956.

1,604,000 hospital beds in U.S. in 1955.

430,000 professional nurses in 1955.

300,000 practical nurses, attendants, nurses' aids in 1955.

4,735 medical school graduates in 1930.

5,275 medical school graduates in 1940.

6,135 medical school graduates in 1950.

6,845 medical school graduates in 1956.

Voluntary Health Insurance

Another development of great importance in the furnishing of medical care has been the growth of voluntary health insurance. Twenty years ago the number of persons covered by some form of health insurance was only 1.5 million. When the drive was on for compulsory health insurance in 1949, just over 50 million persons were covered by voluntary insurance. Organized medicine contended then that voluntary coverage would expand, thus obviating the need for government insurance. These figures prove this was a good estimate of the situation.

110,000,000 persons now covered for hospital charges.

92,000,000 persons now covered for physicians' charges for surgery.

55,000,000 persons now covered for physicians' medical charges in hospitals.

10,000,000 persons now covered for physicians' home and office call charges.

10,000,000 persons now covered for major medical expenses (catastrophic) compared with 1,200,000 covered in 1953.

Health Bills Introduced in Congress

National legislators have not held back on the sponsoring of many health and medical bills. They cover just about every phase of medicine and human welfare. Most of them, of course, never get past committees. But as an indicator of the growing interest in health legislation these figures on bills introduced are illuminating:

250 measures, 1951-1952, 82nd Congress

407 measures, 1953-1954, 83rd Congress

571 measures, 1955-1956, 84th Congress

Potential Beneficiaries of Federal Medicine

Some of the greatest activity in the health field has involved laws and amendments to laws that widen the scope of medical care for federal beneficiaries. The very latest is Medicare voted last year for military dependents. Today nearly one out of every four persons, including over 22 million veterans, is eligible to receive at no cost to them some degree of medical care from the Federal Government.

22,599,000 living veterans as of January 1, 1957.

5,200,000 military personnel and their dependents.

300,000 beneficiaries of the Public Health Service, including 200,000 seamen, but excluding beneficiaries of Federal Employees' Compensation Act and Indians.

5,100,000 public assistance recipients.

370,000 Indians and Alaskan natives receiving care in 56 federal hospitals or in private facilities under contract.

4,000,000 beneficiaries of the Federal Bureau of Employees' Compensation Act (at-work injuries only).

* * * * *

48,627 PHS hospital admissions in 16 hospitals in 1956.

1,042,000 out-patient visits in 121 PHS out-patient facilities during 1956.

Foreign Economic Aid Programs (entirely U.S.) and the World Health Organization (U.S. largest contributor) give limited health care in 92 foreign countries. Example: 25,300,000 children were vaccinated in 1956.

7,000,000 federal employees and their dependents (will be eligible for health care if proposed legislation is enacted).

Federal Health Spending

Under the impetus of new legislation enacted during the last few years—and particularly the new emphasis on medical research—the federal health budget is rising steadily. Bills introduced in the present (85th) Congress seek to expand many existing programs or set up new ones. The following table gives the total federal health bill for the current and last fiscal year and a breakdown of health-spending for the top three departments of government.

	Fiscal 1957	Fiscal 1956	In-crease
Total, all agencies	\$2,558,719,168	\$2,268,826,576	12.8%
Veterans' Administration	\$ 825,024,300	\$ 790,185,800	4.4%
Department of Defense	\$ 790,105,000	\$ 818,104,500	
Department of HEW	\$ 772,661,800	\$ 526,935,400	46.6%

Social Security

Of all the programs of government enacted in the last several decades, none has had greater impact on the population or has been subject to more liberalizing amendments than the Social Security Act of 1935. It began on a relatively modest scale, with retirement payments of up to \$10 a month for wage-earners who reached age 65. At that time, there were no benefits for the surviving spouse and children.

Now, 22 years later, the law has been amended to include: (1) survivorship benefits, (2) maximum monthly family survivorship payments as high as \$200, and (3) a program enacted in 1956 and effective this July 1 for payment of social security benefits to disabled workers at age 50. Efforts continue to be made to amend the law, including a program of free hospitalization of the aged, disability benefits at all ages, and compulsory national health insurance. Statistics on the program as it exists today:

9,250,000 persons received OASI monthly checks in January, 1957.

70,000,000 wage-earners are covered and being taxed; 9 out of 10 persons in the U.S. are primarily "insured" or are their beneficiaries.

\$22,519,000,000 in U.S. bonds in OASI Trust Fund.

Payments from the OASI Trust Fund and contributions to it are now about equal.

Tax rate is 2¼% for employees and employers (4½% total); 3¾% for self-employed.

Under present law, 1975 rate will be 4¼% for employees and employers (8½% total); 6¾% for self-employed.

Under a 1956 law, permanently and totally disabled persons aged 50-65 can get payments equal to retirement payments.

Over 1,000,000 inquiries already have been made for disability payments or "disability freeze"; about one-half of the more than half a million formal applications have been approved.

* * * * *

Labor organizations propose a \$6,000 tax base on which contributions would be computed, instead of the present \$4,200 base.

Public Assistance

A part of the Social Security Act, but a separate administrative operation, the public assistance program also was enacted in 1935. Its basic purpose was to assist states in providing subsistence for destitute families. From the beginning, the states have contributed a portion of funds for the various categories of recipients. Federal appropriations 20 years ago were about \$209 million annually. Now they have increased more than seven-fold, so that the appropriation for the current fiscal year approximates \$1.5 billion. There are four programs: aged, blind, permanently and total disabled, dependent children.

Until amendments last year, unspecified federal-state funds were paid out for medical services of the needy. An educated guess has been that between \$90 and \$100 million of federal money has been going into such medical payments. A more accurate estimate should be forthcoming as a result of the 1956 amendments. These amendments set up a new category of federal-state payments for medical care over and above the old subsistence payment limits, with medical payments going directly to the physician, hospital, druggist, clinic or nursing home.

5,100,000 persons get monthly public assistance checks—medical costs included.

Under new law, direct medical payments are to be made in behalf of assistance recipients to physicians, nursing homes, hospitals, and for drugs. These direct payments will probably exceed \$200,000,000 and could reach \$300,000,000 by 1958.

Veterans

Another vast program with high demands on the federal budget is that for veterans medical care. The policy of the Federal Government is that wartime veterans with service-incurred disabilities are entitled to the best medical and hospital care that can be provided. The American Medical Association supports this policy. Congress in June, 1924, authorized VA to admit indigent non-service-connected veterans when there were spare beds. By 1957 roughly 75 per cent of all cases treated in VA hospitals were for injuries and diseases not originating during or aggravated by military service.

Now the problem is becoming more complicated as the veteran population grows older (World War I veteran in VA hospitals averages age 62) and becomes subject to chronic illnesses. Demands increase for use of VA facilities. Today VA requires: a full-time staff of over 4,600 physicians; 2,247 residents; 11,000 part-time consultants; and thousands of doctors on a contract basis for the agency's home-town care program.

22,599,000 total number of living veterans as of January, 1957.

121,865 total number of VA hospital beds as of January, 1957.

111,540 number of patients in VA hospital facilities on an average 1957 day.

\$619,614,000 will be spent by VA for in-patient care in fiscal year 1957.

\$82,638,000 will be spent for out-patient care in fiscal year 1957.

More than 2 out of 3 veterans treated in VA hospitals are treated for non-service-connected conditions.

PRESIDENT'S LETTER



I feel quite sure the Past Presidents of this Association approached their time of retirement with the same mixed feelings I am experiencing. In casting about for areas in which there was a possibility I might have rendered some service, my view became fogged by mental pictures of such men as: Moorman, Lain,, Risser, Weber, Long, Osborn, Stevenson, Garrison, et al.

Despite the wonderful increases in the technology of every branch of medicine, no substitute has been found for the wisdom of men of their caliber. This is the reason our Association exists. It is an organization made up of physicians wishing to increase and implement our medical wisdom. This all on a voluntary basis, mind you. We serve as a catalyst that augments laboratory and clinical medicine.

The idea is succinctly put by Dr. Phillip Hench in his preface to *A Pictorial History of Medicine* (Charles C. Thomas).

"A scientific truth does not become a fact," writes Dr. Hench, "until it operates. In the last analysis, that can happen only when and wherever the informed, dedicated physician and a single patient who needs him actually meet. It is in this place, a sickroom of whatever kind if may be, where the truthful dreaming of the theorist, the demonstrations of the experimentalist, the magic of the chemist, the guidance of the laboratory, and the wisdom of the practitioner finally come together for their critical testing. Only in the sickroom can these separate forces demonstrate their basic truthfulness and ultimate usefulness, only here can they unite to fulfill their destiny of healing.

"Alone here in such a room the physician must practice both his art and his science. And if his prescription is fashioned well by head and heart he will truly represent Medicine, which, above all other arts and skills, seeks to preserve and restore the creative capacity of man."

This Association, regardless of personal differences, must never allow itself to become divided. The purveyors of the "Socialist State" are frequently and subtly proposing measures they hope will create a hiatus, which will become our tomb.

Thanks for the rich experience of serving you.

Henry McChure M.D.
President

WELCOME TO TULSA

Once again it is the pleasure and privilege of the Tulsa County Medical Society to welcome the members of the Oklahoma State Medical Association to Tulsa for the 51st Annual Meeting, May 6-8, 1957.

A splendid program of events has been arranged. Twelve nationally known visiting distinguished guest speakers highlight the scientific sessions with presentations on interesting and useful subjects. There will also be medical motion pictures, scientific and commercial exhibits, television presentations, roundtable luncheons, and panel discussions to add to your pleasure.

Tulsa offers many beautiful museums, civic attractions, and fine shops. It will be a pleasure for Tulsa doctors to be your hosts, and we hope that every member of the Association will plan to attend.

Sincerely,

G. R. RUSSELL, M.D., *President*
Tulsa County Medical Society

Officers and Councilors

OKLAHOMA STATE MEDICAL ASSOCIATION



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Chickasha
President



John F. Burton, M.D.
Oklahoma City
President-Elect



Johnny A. Blue, M.D.
Oklahoma City
Secretary-Treasurer

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Delegate to the A.M.A.—John F. Burton, M.D., Oklahoma City
Alternate Delegate to the A.M.A.—Malcom E. Phelps, M.D., El Reno
Speaker of the House of Delegates—Clinton Gallaher, M.D., Shawnee
Vice Speaker—J. Hoyle Carlock, M.D., Ardmore

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Councilor (1959).....F. S. Etter, M.D., Bartlesville
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Vice-Councilor (1959).....C. A. Traverse, M.D., Alva

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Councilor (1957).....A. L. Johnson, M.D., El Reno
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District No. 6: Oklahoma
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.....Elmer Ridgeway, Jr., M.D., Oklahoma City
Vice-Councilor (1958).....
.....P. E. Russo, M.D., Oklahoma City

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Councilor (1959).....C. C. Young, M.D., Shawnee
Vice-Councilor (1959).....Paul Gallaher, M.D., Shawnee

District No. 8: Tulsa
Councilor (1957).....Wendell L. Smith, M.D., Tulsa
Vice-Councilor (1957).....Marshall O. Hart, M.D., Tulsa

District No. 9: Adair, Cherokee, McIntosh, Muskogee, Okmulgee, Sequoyah, Wagoner
Councilor (1958).....F. R. First, Jr., M.D., Checotah
Vice-Councilor (1958).....
.....I. W. Bollinger, M.D., Henryetta

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Vice-Councilor (1959).....C. D. Lively, M.D., McAlester

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Councilor (1957).....A. T. Baker, M.D., Durant
Vice-Councilor (1957).....T. E. Rhea, M.D., Idabel

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Councilor (1958).....Wm. T. Gill, M.D., Ada
Vice-Councilor (1958).....
.....M. E. Robberson, M.D., Wynnewood

District No. 13: Caddo, Comanche, Cotton, Grady, Jefferson, Stephens
Councilor (1959).....John B. Miles, M.D., Anadarko
Vice-Councilor (1959).....Chas. E. Green, M.D., Lawton

District No. 14: Greer, Harmon, Jackson, Kiowa, Tillman, Washita
Councilor (1957).....J. B. Hollis, M.D., Mangum
Vice-Councilor (1957).....R. R. Hannas, M.D., Sentinel

General Information

HOTEL ACCOMMODATIONS

Physicians planning to attend the 51st Annual Meeting of the Oklahoma State Medical Association in Tulsa, May 6-8, 1957, should write at once for hotel accommodations. A convenient reservation coupon is included in this issue of *The Journal*, which should be promptly completed and returned to: Hotels Committee, Tulsa County Medical Society, B9 Medical Arts Building, Tulsa. Most visitors will be housed at the convention headquarters, The Mayo. Early reservations are suggested.

REGISTRATION

General Registration will open Monday, May 6, 1957, at 8:00 a.m. in the Lobby Exhibit Area in the Lobby of The Mayo. Members of the House of Delegates and others may register on Sunday, May 5, 1957, on the Mezzanine of The Mayo beginning at 12:00 Noon. Members are required to present their 1957 membership cards before registering. Interns, residents, members of the Armed Forces, and visiting physicians who are members of other state medical associations will be accorded guest privileges.

SCIENTIFIC SESSIONS

A complete program of the scientific sessions appears in this issue of *The Journal*. It is important to note that on Monday and Tuesday afternoons, May 6-7, there will be two separate scientific sessions running concurrently. One session will be in the Crystal Ballroom on the 16th Floor of The Mayo, and a second session will be in the Emerald Room on the Mezzanine of The Mayo. There will be only one general scientific session on Monday, Tuesday and Wednesday mornings, May 6-8, 1957. The scientific sessions will close on Wednesday, May 8, at 12:30 p.m.

HOUSE OF DELEGATES

The House of Delegates will meet on Sunday, May 5, 1957, at 1:00 p.m. in the Pompeian Room on the Mezzanine of The Mayo. Following an intermission for dinner, the second session will convene at 7:00 p.m. A

special feature of the House of Delegates will be an address by Dr. David B. Allman, President-Elect of the American Medical Association, Atlantic City, New Jersey, at 3:30 p.m. Dr. Allman will report on national medical affairs and the prospects for the future. A special section has been reserved for visitors.

COUNCIL

The Council of the Oklahoma State Medical Association will meet on Saturday evening, May 4, 1957, at 7:00 p.m. in the Ivory Room of The Mayo. This will be a dinner meeting.

GOLF TOURNAMENT

A special feature of the 51st Annual Meeting will be the Oklahoma State Medical Association Annual Golf Tournament and Dinner on Wednesday afternoon, May 8th, at Tulsa Country Club. Pfizer Laboratories will be hosts for this event. Golfing begins at 12 Noon. A complimentary social hour and dinner is scheduled for 6:00 p.m. in the Clubhouse. Participants are asked to register at the General Registration Desk in the Lobby of The Mayo or with any Pfizer professional service representative. This entire event, including golfing, social hour and dinner, is complimentary. Golfers must bring their own golfing equipment. Tulsa Country Club is located only a few blocks from the downtown area and is reached by a short taxi ride.

SHORE DINNER

A highlight of the 51st Annual Meeting will be a Complimentary Shore Dinner on Monday evening, May 6th, tendered to visiting physicians and their wives by the Blue Cross-Blue Shield Plans of Oklahoma. Guests may attend at their convenience between 6:00 p.m. and 9:00 p.m. Fresh oysters, broiled lobster, and cooked and fresh shrimp will be served buffet style, along with an attractive assortment of breads, salads, and desserts. There will be no formal program. The Shore Dinner, prepared and served by The Louisiane, one of Tulsa's

finer seafood restaurants, will be in the Auditorium of the Blue Cross-Blue Shield Building, 1215 South Boulder.

HOBBY SHOW

By popular demand the Physicians Hobby Show, displaying popular hobbies of members of the Oklahoma State Medical Association, will again be a feature of the Annual Meeting. A special section has been reserved in the Ivory Room of The Mayo. Paintings, woodwork, sculpture, models, weavings, collections, and other hobbies will be presented. The Hobby Show is a project of the Woman's Auxiliary to the Oklahoma State Medical Association.

ROUNDTABLE LUNCHEONS

Daily roundtable luncheons are scheduled in the Pompeian Room of The Mayo at 12:30 p.m. on Monday and Tuesday, May 6-7. Members will have the opportunity of asking questions of the visiting distinguished guest speakers following the luncheon. A schedule of appearances of guest speakers is contained in the program. Tickets are \$2.50 per person and should be purchased at the time of registration.

COMMERCIAL EXHIBITS

Thirty-nine outstanding commercial exhibits of leading pharmaceutical manufacturers, book publishers, surgical and x-ray equipment, and other firms whose products and services are of interest to doctors will be on display. The exhibit is divided into two sections—one on the 16th Floor of The Mayo immediately adjacent to the Crystal Ballroom, and a second in the Main Lobby of The Mayo. Convention visitors are urged to inspect each exhibit and visit the exhibitors at their convenience. A description of the commercial exhibits is to be found in this issue of *The Journal*.

SCIENTIFIC EXHIBITS

A selection of excellent scientific exhibits prepared by members of the Oklahoma State Medical Association and other organizations will be on display throughout the convention in the Ivory Room on the Mezzanine of The Mayo. A listing of the exhibits received through March 15, 1957, is contained in this issue of *The Journal*.

PAST PRESIDENT'S BREAKFAST

The Annual Past President's Breakfast will be held Tuesday morning, May 7, 1957, at 8:00 a.m. at the Mayo. Former presidents will be guests of the Blue Cross-Blue Shield Plans for this event.

MEDICAL MOTION PICTURES

A program of outstanding medical motion pictures in sound and color will be presented Monday and Tuesday, May 6-7, at The Mayo. The program of Monday, May 6th, will be in the Emerald Room, and the program of Tuesday, May 7th, in the Metropolitan Room. A complete listing and description of the films to be shown appears in this issue of *The Journal*.

TENNIS TOURNAMENT

The First Annual Tennis Tournament of the Oklahoma State Medical Association has been scheduled for Tuesday and Wednesday, May 7-8, at the Tulsa Tennis Club, 2801 South Columbia Place. Members of the Association will play on the Club's five new Rubico courts. Clubhouse and locker facilities are available at the Club. Members wishing to participate are asked to write in advance to: Dr. Walter E. Brown, 2020 South Xanthus Street, Tulsa, Oklahoma.

CONVENTION OFFICIALS

General Chairman: Walter E. Brown, M.D.

Program: Edward L. Moore, M.D., Chairman, Emil E. Palik, M.D., Henry S. Browne, M.D., Felix R. Park, M.D., G. R. Russell, M.D., L. A. Munding, M.D., Wilkie D. Hoover, M.D.

Scientific Exhibits: R. W. Goen, M.D.

Medical Motion Pictures: N. C. Gaddis, M.D.

Social Events: Jack L. Richardson, M.D.

Commercial Exhibits: Donald L. Brawner, M.D., Chairman, Robert W. Spencer, M.D., Robert A. Nelson, M.D.

Hotels and Registration: Robert E. Funk, M.D., Chairman, Paul N. Atkins, Jr., M.D., E. Lee Gentry, M.D.

Publicity and Press Relations: E. N. Lubin, M.D., Chairman, Robert D. Grubb, M.D., William C. Alston, Jr., M.D., Coleman H. Rosenberg, M.D., H. Kenneth Ihrig, M.D.

Annual Golf Tournament: Robert Hall Johnson, M.D., Chairman, H. J. Rubin, M.D., James W. Kelley, M.D.

MEDICAL TELEVISION

MONDAY, MAY 6, 1957

Crystal Ballroom, Mezzanine, The Mayo

1:00 p.m. — 2:00 p.m.

Panel Discussion:

THE PHYSICIAN AND EMOTIONAL DISTURBANCE

Guest Participants:

C. KNIGHT ALDRICH, M.D., Professor of Psychiatry, *University of Chicago* — Medical School, Chicago, Illinois.

C. H. HARDIN BRANCH, M.D., Professor and Chairman of the Department of Psychiatry, University of Utah School of Medicine, *Salt Lake City, Utah*.

E. IRVING BAUMGARTNER, M.D., Secretary of the Section on General Practice, American Medical Association, *Oakland, Maryland*.

ANDREW S. TOMB, M.D., Chairman on the Liaison Committee on Mental Health, American Academy of General Practice, *Victoria, Texas*.

Moderator For Tulsa: Joe E. Tyler, M.D., *Tulsa*.

Sponsored by Smith, Kline & French Laboratories, Philadelphia, Pennsylvania.

Oklahoma Physicians Will Be Able to Ask Questions of Chicago Panelists Via Telephone Transmitter

This outstanding closed circuit television presentation will emanate from Chicago, Illinois. It is being telecast to doctors in attendance at the annual meetings of the State Medical Associations of Oklahoma, Kansas, Louisiana, Florida and North Carolina.

Oklahoma doctors will see the program on a large projector type television screen approximately eight by ten feet in size.

Oklahoma physicians will be able to ask questions directly of the panelists in Chicago through the medium of a telephone transmitter in the Crystal Ballroom. Dr. Joe E. Tyler, Tulsa psychiatrist, will serve as Moderator for the Tulsa audience.

This program is made possible through the courtesy of Smith, Kline & French Laboratories, Philadelphia, Pennsylvania, manufacturers of research products and pharmaceuticals.

Scientific Program

MONDAY, May 6, 1957

GENERAL SESSION—SECTION ONE

Crystal Ballroom, The Mayo

H. M. McClure, M.D., Chickasha, Chairman

- 8:55 a.m. ARE YOU FACING A RADIATION HAZARD?
Peter E. Russo, M.D., *Oklahoma City*
- 9:15 a.m. NEW DRUGS AND AN ERA OF ANALGESIA AND AMNESIA
John S. Lundy, M.D., *Rochester, Minnesota*
- 9:45 a.m. HEMATURIA: ITS IMPORTANCE AND MANAGEMENT
Michael K. O'Heeron, M.D., *Houston, Texas*
- 10:30 a.m. THE PREDICTION OF FUTURE RISK OF CORONARY HEART DISEASE
IN OSTENSIBLY HEALTHY INDIVIDUALS
John W. Gofman, M.D., *Berkeley, California*
- 11:15 a.m. OPERATION FOR CORONARY ARTERY DISEASE
Claude S. Beck, M.D., *Cleveland, Ohio*
-

- 12:30 p.m. ROUNDTABLE LUNCHEON. Pompeian Room, The Mayo
John E. McDonald, M.D., *Tulsa*, Chairman
Guest Participants: Claude S. Beck, M.D., John W. Gofman, M.D.,
John S. Lundy, M.D., Michael K. O'Heeron, M.D.
-

GENERAL SESSION—SECTION ONE

Crystal Ballroom, The Mayo

JOHN F. BURTON, M.D., Oklahoma City, Chairman

- 1:00 p.m. Closed Circiut Television Presentation:
THE PHYSICIAN AND EMOTIONAL DISTURBANCE
Emanating from Chicago, Illinois. Sponsored by Smith, Kline & French
Laboratories
Guest Panelists: C. Knight Aldrich, M.D., *Chicago, Illinois*; C. H.
Hardin Branch, M.D., *Salt Lake City, Utah*; E. Irving Baumgartner,
M.D., *Oakland, Maryland*; Andrew S. Tomb, M.D., *Victoria, Texas*.
Moderator: Joe E. Tyler, M.D., *Tulsa*
- 3:10 p.m. FETAL SALVAGE IN OBSTETRICS
Robert A. Cosgrove, M.D., *Jersey City, New Jersey*
- 3:55 p.m. ALTERED PHYSIOLOGY IN PATIENTS WITH CARDIOVASCULAR DIS-
TURBANCES DURING PREGNANCY AND DELIVERY
George C. Griffith, M.D., *Los Angeles, California*
- 4:40 p.m. LOW BACK PAIN
Lucien M. Pascucci, M.D., *Tulsa*

MEDICAL MOTION PICTURES

Emerald Room, Mezzanine, The Mayo

N. C. GADDIS, M.D., Tulso, Moderator

- 8:30 a.m. MODERN CONCEPTS OF EPILEPSY
Ayerst Laboratories. *25 Minutes*
- 9:00 a.m. RESECTION OF ARTERIOSCLEROTIC ANEURYSMS OF THE ABDOMINAL AORTA AND REPLACEMENT BY HOMOGRAFT
Michael E. DeBakey, M.D., Houston, Texas. *26 Minutes*
- 9:30 a.m. ANTITUBERCULOSIS DRUGS IN THE MEDICAL AND SURGICAL TREATMENT OF TUBERCULOSIS
E. R. Squibb & Sons. *30 Minutes*
- 10:00 a.m. RADIOISOTOPES: THEIR APPLICATION TO HUMANS AS TRACER STUDIES AND FOR THERAPEUTIC USE
Medical Film Guild, Ltd. *25 Minutes*
- 10:30 a.m. GAIT: THE MECHANISMS INVOLVED IN VARIOUS TYPES OF ABNORMALITIES
Imperial Chemical Industries. *33 Minutes*
- 11:05 a.m. TRANSDUODENAL SECTION OF THE SPHINCTER OF ODDI FOR PANCREATITIS
John H. Mulholland, M.D., New York, N.Y. and Henry Doubilet, M.D., New York, N.Y. *24 Minutes*
- 11:30 a.m. RECORDING OXIMETERS AND THEIR APPLICATIONS
John F. Perkins, Jr., M.D., Chicago, Illinois, and William E. Adams, M.D., Chicago, Illinois. *15 Minutes*

GENERAL SESSION—SECTION TWO

Emerald Room, Mezzanine, The Mayo

G. R. RUSSELL, M.D., Tulsa, Chairman

- 2:00 p.m. BLOOD LIPIDS AND HUMAN ARTERIOSCLEROSIS
DIETARY AND PHARMACEUTICAL APPROACHES TO PREVENTION AND MANAGEMENT OF CORONARY HEART DISEASE
John W. Gofman, M.D., *Berkeley, California*
- 3:00 p.m. ENCEPHALITIS
Russell J. Blattner, M.D., *Houston, Texas*
- 3:45 p.m. CARDIAC RESUSITATION
Claude S. Beck, M.D., *Cleveland, Ohio*
- 4:20 p.m. OUR EXPERIENCE WITH AORTOGRAPHY
Thomas O. Hodges, M.D., *Oklahoma City*
- 4:40 p.m. DIFFERENTIAL DIAGNOSIS AND CONDITIONS SIMULATING PATENT DUCTUS ARTERIOSUS
Marion K. Ledbetter, M.D., *Tulsa*
- 6:00 p.m. COMPLIMENTARY BUFFET SHORE DINNER. Blue Cross-Blue Shield Building, 1215 South Boulder.
Compliments of the Blue Cross and Blue Shield Plans of Oklahoma.
Serving from 6:00 p.m. to 9:00 p.m.

TUESDAY, May 7, 1957

GENERAL SESSION

Crystal Ballroom, The Mayo

EDWARD L. MOORE, M.D., Tulsa, Chairman

- 8:40 a.m. MODERN CONCEPTS IN THE TREATMENT OF CARDIAC ARRHYTHMIAS
W. T. McCollum, M.D., *Oklahoma City*
- 9:00 a.m. CHANGES IN THE CARDIOVASCULAR SYSTEM FOLLOWING OOPHORECTOMY IN YOUNG WOMEN
George C. Griffith, M.D., *Los Angeles, California*
- 9:45 a.m. EVALUATION OF THE PRESENT USE OF CESAREAN SECTION
Robert A. Cosgrove, M.D., *Jersey City, New Jersey*
- 10:30 a.m. CONGENITAL MALFORMATIONS—POSSIBLE ROLE OF VIRUS INFECTION
Russell J. Blattner, M.D., *Houston, Texas*
- 11:15 a.m. THE RADIOLOGIC APPROACH IN PROBLEMS OF GASTRO-INTESTINAL HEMORRHAGE
Paul C. Swenson, M.D., *Philadelphia, Pennsylvania*
- 12:00 noon MODERN TECHNIQUES FOR RELIEF OF PAIN
John S. Lundy, M.D., *Rochester, Minnesota*
-

- 12:30 p.m. ROUNDTABLE LUNCHEON. Pompeian Room, The Mayo
L. A. Munding, M.D., *Tulsa*, Chairman
Guest Participants: Russell J. Blattner, M.D., Robert A. Cosgrove, M.D., George C. Griffith, M.D., Paul C. Swenson, M.D.
-

GENERAL SESSION—SECTION ONE

Crystal Ballroom, The Mayo

WALTER E. BROWN, M.D., Tulsa, Chairman

- 2:00 p.m. SYMPOSIUM ON GASTRO-INTESTINAL BLEEDING
Participants: Russell J. Blattner, M.D., *Houston, Texas*; John S. Lundy, M.D., *Rochester, Minnesota*; John A. Schilling, M.D., *Oklahoma City*; Paul C. Swenson, M.D., *Philadelphia, Pennsylvania*
-

- 6:30 p.m. PRESIDENT'S INAUGURAL DINNER DANCE. Crystal Ballroom, The Mayo
Social Hour and Dinner, 6:30 p.m.
Dancing, Cimarron Ballroom, 9:00 p.m.-1:00 a.m.

MEDICAL MOTION PICTURES

Metropolitan Room, Mezzanine, The Mayo

N. C. GADDIS, M.D., Tulsa, Moderator

- 8:30 a.m. THE SURGICAL TREATMENT OF VARICOSE VEINS
Geza de Takats, M.D., Chicago, Illinois. 24 Minutes
- 9:00 a.m. ABNORMALITIES OF THE EXTRAHEPATIC BILIARY DUCTAL SYSTEM
I. S. Ravdin, M.D., Philadelphia, Pennsylvania. 25 Minutes
- 9:30 a.m. SURGICAL CORRECTION OF ATRESIA ANI VAGINALIS
John G. Matt, M.D., Tulsa, 30 Minutes
- 10:00 a.m. OVARIAN TUMORS
Herbert E. Schmitz, M.D., Chicago, Illinois. 26 Minutes
- 10:30 a.m. EARLY MANAGEMENT OF THE SEVERELY BURNED PATIENT
Edwin H. Ellison, M.D., Columbus, Ohio. 30 Minutes
- 11:00 a.m. INTESTINAL RESECTION FOR CHRONIC SEGMENTAL ILEITIS
Harold L. Foss, M.D., Danville, Pennsylvania. 28 Minutes
- 11:30 a.m. THE SURGICAL MANAGEMENT OF CALCIFIC PANCREATITIS
Robert J. Coffey, M.D., Washington, D.C. 22 Minutes
-

GENERAL SESSION—SECTION TWO

Emerald Room, Mezzanine, The Mayo

CHARLES G. STUARD, M.D., Tulsa, Chairman

- 2:00 p.m. PITUITARY TUMORS
Eric Oldberg, M.D., Chicago, Illinois
- 2:30 p.m. THE PHYSICIAN AS NUTRITIONIST
I. Phillips Frohman, M.D., Washington, D.C.
- 3:00 p.m. TREATMENT OF LEUKEMIA
John W. DeVore, M.D., Oklahoma City
- 3:20 p.m. EXFOLIATIVE CYTOLOGY OF DUODENAL ASPIRATION
Virgil R. Forester, M.D., Oklahoma City
- 3:40 p.m. FRACTURES OF SHORT LONG BONES OF HAND
William L. Waldrop, M.D., Oklahoma City
- 4:00 p.m. PRACTICAL UROLOGICAL AIDS IN DIAGNOSING THE ACUTE SURGICAL ABDOMEN
Michael K. O'Heeron, M.D., Houston, Texas

WEDNESDAY, May 8, 1957

GENERAL SESSION

Crystal Ballroom, The Mayo

JOE M. PARKER, M.D., Oklahoma City, Chairman

8:30 a.m. AN ANALYSIS OF BACK INJURIES IN THE TRI-STATE AREA
M. A. Connell, M.D., *Picher*

9:00 a.m. TREATMENT OF HEAD INJURIES
Eric Oldberg, M.D., *Chicago, Illinois*

9:45 a.m. HEMATOLOGICAL SYMPOSIUM
Participants: William Dameshek, M.D., *Boston, Massachusetts*; Russell J. Blattner, M.D., *Houston, Texas*; Emil E. Palik, M.D., *Tulsa*; Paul C. Swenson, M.D., *Philadelphia, Pennsylvania*

12:00 noon OKLAHOMA STATE MEDICAL ASSOCIATION ANNUAL GOLF TOURNAMENT AND DINNER. Sponsored by Pfizer Laboratories. Tulsa Country Club. Golfing begins 12:00 noon. Social Hour, 6:00 p.m. Buffet Dinner and Awarding of Prizes, 7:00 p.m. Robert Hall Johnson, M.D., *Tulsa*, Chairman.

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MEDICAL MOTION PICTURES

An outstanding program of medical motion pictures has been arranged for Monday and Tuesday mornings, May 6-7. These films are in sound and most are in color. They have been carefully selected for their interest to the Oklahoma physician and value in daily office practice. A description of the films to be shown follows:

MONDAY, MAY 6, 1957

Emerald Room, Mezzanine, The Mayo

8:30 a.m. MODERN CONCEPTS OF EPILEPSY

Ayerst Laboratories. Prepared under the medical supervision of Francis M. Forster, M.D., Dean and Professor of Neurology, Georgetown University School of Medicine, this film reviews the most recent advances in the treatment of this disease utilizing clinical cases.

9:00 a.m. RESECTION OF ARTERIOSCLEROTIC ANEURYSMS OF THE ABDOMINAL AORTA AND REPLACEMENT BY HOMO-GRAFT

Michael E. DeBakey, M.D., Houston, Texas, and Denton A. Cooley, M.D., Houston, Texas. Until recently the treatment of aortic aneurysm has been unsatisfactory and palliative at best. This film demonstrates in two cases of arteriosclerotic aneurysm of the abdominal aorta the principles of excision therapy of such lesions. Technical aspects of the procedure and the method of preparation and use of vascular homografts for aortic replacement are considered.

9:30 a.m. ANTITUBERCULOSIS DRUGS IN THE MEDICAL AND SURGICAL TREATMENT OF TUBERCULOSIS

E. R. Squibb & Sons. This pictorial clinic indicates the expectable benefits as well as the limitations of such antituberculosis drugs as p-aminosalicylic acid (PAS), streptomycin, dihydrostreptomycin, and isoniazid (Nydrazid). A review of the modern drug therapies utilizes clinical patients from ages seven weeks to 74 years. The role of drugs in localizing the disease is discussed in detail.

10:00 a.m. RADIOISOTOPES: THEIR APPLICATION TO HUMANS AS TRACER STUDIES AND FOR THERAPEUTIC USE

Medical Film Guild, Ltd. This film gives a comprehensive review of up-to-date practices in the use of radioisotopes in a visually pertinent fashion. The film shows the actual techniques of administering such substances as radioactive iodine, gold, sodium, iron, calcium, and many others. It presents a graphic idea of what is being done with radioactive isotopes in clinical medicine.

10:30 a.m. GAIT: THE MECHANISMS INVOLVED IN VARIOUS TYPES OF ABNORMALITIES

Imperial Chemical Industries. This excellent film explains in simple terms the mechanisms involved in various types of abnormalities of gait. With the use of colored diagrams, lesions are located and identified, and the gait of a person having such a lesion is clinically demonstrated. The film illustrates such abnormal movements as may result from damage to the spinal cord, disturbances of the pyramidal tract, lesions of the peripheral nerves, etc.

11:05 a.m. TRANSDUODENAL SECTION OF THE SPHINCTER OF ODDI FOR PANCREATITIS

John H. Mulholland, M.D., New York, N.Y., and Henry Doubilet, M.D., New York, N.Y. The technique and etiology of sphincterotomy and operative cholangiography in the treatment of recurrent acute pancreatitis is covered in this useful film.

11:30 a.m. RECORDING OXIMETERS AND THEIR APPLICATION

John F. Perkins, Jr., M.D., Chicago, Illinois, and William E. Adams, M.D., Chicago, Illinois. The principles of oximeters are reviewed in this film by means of a photoelectric exposure meter and transparent containers containing red and blue dyes to simulate oxygenated and reduced blood. The various types of oximeters are shown and their application demonstrated in a dramatic fashion.

TUESDAY, MAY 7, 1957

Metropolitan Room, Mezzanine, The Mayo

8:30 a.m. THE SURGICAL TREATMENT OF VARICOSE VEINS

Geza de Takats, M.D., Chicago, Illinois. This film shows ligation of the long and short saphenous veins at their junction with deep venous system together with stripping of these segments and supplemented with individual ligation of perforators as they emerge through the deep fascia.

9:00 a.m. ABNORMALITIES OF THE EXTRAHEPATIC BILIARY DUCTAL SYSTEM

I. S. Ravdin, M.D., Philadelphia, Pennsylvania. The patient seen in this film had an abnormally long cystic duct which entered into the left side of the common duct. He was left at the time of a cholecystectomy with a long cystic duct remnant, which contained a stone. This film describes a series of operation for correction of the conditions encountered.

9:30 a.m. SURGICAL CORRECTION OF ATRESIA ANI VAGINALIS

John G. Matt, M.D., Tulsa, Oklahoma. This film shows the Rizzoli-Stone operation being used to correct a case of atresia ani vaginalis. Several slight modifications, which have been found to make the operation easier and which yield a better result, are demonstrated. The film also shows the proper technique of using a closed method of anesthesia in pediatric surgery.

10:30 a.m. OVARIAN TUMORS

Herbert E. Schmitz, M.D., Chicago, Illinois. This film demonstrates the more common benign and malignant ovarian tumors in situ and after removal. It stresses the points of different diagnosis so important at the operating table.

10:30 a.m. EARLY TREATMENT OF THE SEVERELY BURNED PATIENT

Edwin H. Ellison, M.D., Columbus, Ohio. This color motion picture shows in sequence the important steps in managing the severely burned patient. Prevention of infection and the treatment of shock are included. The technique of the

initial treatment of the burned surface and the application of occlusive, absorptive dressings are demonstrated.

11:00 a.m. INTESTINAL RESECTION OF CHRONIC SEGMENTAL ILEITIS

Harold L. Foss, M.D., Danville, Pennsylvania. This film covers the diagnosis, pathology, symptomatology and surgical treatment. Microscopic sections with pathological descriptions of specimens are presented as well as x-ray films of various types of lesions. Extensive resection of the lower ileum with an end-to-end anastomosis for chronic segmental ileitis is demonstrated.

11:30 a.m. THE SURGICAL MANAGEMENT OF CALCIFIC PANCREATITIS

Robert J. Coffey, M.D., Washington, D.C. This film presents the concept that in calcific pancreatitis the calcareous material is intraductal. The surgical procedure employed in three illustrative cases each of which possesses a different problem is included together with roentgenologic demonstration of the calcific disease, pathological specimens and the results of pre and postoperative blood lipid studies.

Special Buffet Shore Dinner

**SPECIAL COMPLIMENTARY SHORE DINNER
FOR DOCTORS AND WIVES**

Monday, May 6, 1957

Blue Cross-Blue Shield Building, 1215 South Boulder

6:00-9:00 p.m.

Like oysters? And shrimp? And lobster?

Then the Special Complimentary Shore Dinner tendered by the Blue Cross-Blue Shield Plans of Oklahoma is your guarantee of a delightful evening.

All convention registrants are invited to the beautiful new Blue Cross-Blue Shield Building, 1215 South Boulder, at their convenience between 6:00 p.m. and 9:00 p.m. Delicious fresh oysters, shrimp and lobster, along with a mouth-watering assortment of salads, breads, and desserts, prepared and served by The Louisiane, one of Tulsa's finer seafood restaurants, will be served buffet style. All you can eat! This is one time you can be assured of all the seafood you want.

The ladies are invited, of course, and no tickets are needed.

President's Inaugural Dinner-Dance

TUESDAY, MAY 7, 1957

- 6:30 p.m. **SOCIAL HOUR.** Pompeian Room, Mezzanine, The Mayo.
- 7:15 p.m. **DINNER.** Crystal Ballroom. **INAUGURAL CEREMONIES.**
- 9:00 p.m. **DANCING** to the Music of Shep Fields and His Rippling Rhythms Orchestra. Cimarron Ballroom, 4th and Denver, Tulsa. Until 1:00 a.m.



SHEP FIELDS

To provide a maximum of comfortable dancing space, the Shep Fields dance has been scheduled at the Cimarron Ballroom, 4th and Denver Streets, just one block from The Mayo.

Ticket Information

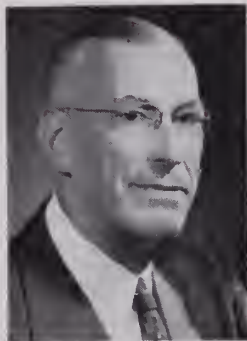
Tickets to the President's Inaugural Dinner Dance on Tuesday, May 7th may be purchased in advance by writing: Tulsa County Medical Society, B9 Medical Arts Building, Tulsa, Oklahoma. The price is \$7.50 per person. Please make your check payable to "Oklahoma State Medical Association." Tickets will be sent by return mail. Only the capacity of the Crystal Ballroom will be sold, and members are urged to purchase tickets in advance to avoid disappointment. Tickets will be available at the General Registration Desk as long as available.

Shep Fields and His Orchestra

The unique and exciting dance rhythms of Shep Fields and His Rippling Rhythm Orchestra first soared to popularity on the Hit Parade broadcasts of the late thirties. Subsequently, Fields was to become a major grosser at the nation's leading ballrooms and hotels. His television appearances and recordings for RCA Victor and Bluebird Records have made him a greater public favorite with audiences everywhere. Members of the Oklahoma State Medical Association will dance to the Fields Orchestra at the President's Inaugural Dinner Dance on Tuesday, May 7th, from 9:00 p.m. to 1:00 a.m. Special artists with the Orchestra include attractive Jackie Austin, vocalist, and Carl Micarelli, accordion virtuoso.

Distinguished Guest Speakers

DAVID B. ALLMAN, M.D.
Atlantic City, New Jersey



President-Elect, American Medical Association. Medical Degree, Jefferson Medical College, 1914. Interned Atlantic City Hospital, Atlantic City, N. J., 1914-15. Diplomate, American Board of Surgery. Fellow, American College of Surgeons. Fellow, International College of Surgeons. President, New Jersey State Board of Medical Examiners. Member, Board of Trustees, American Medical Association, 1951-1957. Formerly Chairman, Committee on Legislation, American Medical Association. Consultant to the United States Public Health Service.

Sponsors: John F. Burton, M.D., Oklahoma City, and John E. McDonald, M.D., Tulsa.

CLAUDE S. BECK, M.D.
Cleveland, Ohio



Professor of Cardiovascular Surgery, Western Reserve University School of Medicine. Medical Degree, Johns Hopkins Medical School, 1921. Interned Johns Hopkins Hospital, Baltimore, Md., 1921-22. Surgical residencies at New Haven Hospital, Peter Bent Brigham Hospital of Boston, and Lakeside Hospital of Cleveland. Arthur Tracy Cabot Fellow in Research Surgery, Harvard University, 1923-24. Crile Fellow in Surgery, Western Reserve University School of Medicine, 1924-25. Diplomate, American Board of Surgery. Diplomate, American Board of Thoracic Surgery. Fellow, American College of Surgeons. Fellow, American Surgical Association for Thoracic Surgery.

Sponsors: C. S. Lewis, Jr., M.D., Tulsa, and Byron W. Steele, Jr., Tulsa.

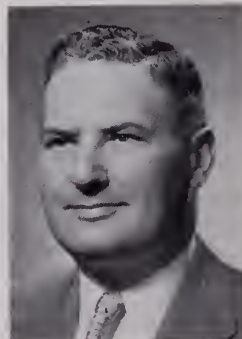
RUSSELL J. BLATTNER, M.D.
Houston, Texas



Professor and Chairman of the Department of Pediatrics, Baylor University College of Medicine. Clinical Professor of Pediatrics, University of Texas Postgraduate School of Medicine, Medical Degree, Washington University School of Medicine, 1933. Internship and residencies, Barnes Hospital, St. Louis, Mo., 1933-37. Resident in Pediatrics, Princess Elizabeth of York Hospital for Children, London, England, 1937. Member of the Faculty, Washington University School of Medicine, 1937-1947. Diplomate, American Board of Pediatrics. Fellow, American Academy of Pediatrics.

Sponsors: George R. Krietmeyer, M.D., Tulsa, and Walter F. Sethney, M.D., Tulsa.

ROBERT A. COSGROVE, M.D.
Jersey City, New Jersey



Assistant Clinical Professor of Obstetrics and Gynecology, Columbia University School of Medicine. Medical Degree, Cornell University Medical College, 1936. Internship and residencies, Bellevue Hospital and Sloan Hospital for Women, New York, N.Y., and Margaret Hague Maternity Hospital, Jersey City, N. J. Diplomate, American Board of Obstetrics and Gynecology. Fellow, American College of Surgeons. Fellow, International College of Surgeons. Member, American College of Obstetricians and Gynecologists. Member, American Association of Obstetricians and Gynecologists. Chief of service, Margaret Hague Maternity Hospital, Jersey City, N. J.

Sponsors: Walter B. Sanger, M.D., Tulsa, and Franklin D. Sinclair, M.D., Tulsa.

WILLIAM DAMESHEK, M.D.
Boston, Massachusetts



Professor of Medicine, Tufts University School of Medicine, Medical Degree, Harvard University School of Medicine, 1923. Internship and residencies, Boston City Hospital, Beth Israel Hospital, and New England Centre Hospital, all of Boston, Mass. Editor-in-

Chief and Founder of *Blood, The Journal of Hematology*. Formerly, President, International Society of Hematology, 1954-56. Diplomate, American Board of Internal Medicine. Fellow, American College of Physicians. Member, American Society of Clinical Investigation. Director, Blood Research Laboratories, New England Medical Center of Boston. Certificate of Merit, American Medical Association, 1942. Author of over 350 published articles, books and monographs on hemotologic subjects.

Sponsors: N. C. Gaddis, M.D., Tulsa, and Emil E. Palik, M.D., Tulsa.

I. PHILLIPS FROHMAN, M.D.
Washington, D.C.



General Practitioner. Medical Degree, University of Maryland, 1937. Interned Flower Hospital, Toledo, Ohio, 1937-38. Resident in Chest Diseases, Licking County Sanatorium, Newkirk, Ohio, 1938-39. Associate Fellow, American College of Chest Physicians.

Member, American Trudeau Society. Fellow, American Geriatrics Association. Formerly Chairman, Section on General Practice, American Medical Association, 1955-56. Editor, *Abstracts of the American Academy of General Practice*, 1955-56. Contributing Editor, *Current Medical Digest*. Fellow, American Medical Writers Association. Member, American Industrial Medical Association. Widely known medical writer and editor.

Sponsors: Wilkie D. Hoover, M.D., Tulsa, and L. A. Munding, M.D., Tulsa.

JOHN W. GOFMAN, M.D.
Berkeley, California



Professor of Medical Physics, University of California. Clinical Instructor of Medicine, University of California Medical School. Medical Degree, University of California School of Medicine, 1946. Interned University Hospitals, San Francisco, Cal., 1946-47.

Fellow, American College of Cardiology. Widely known for his research with the Donner Laboratory, Division of Medical Physics and Radiation Laboratories, University of California. Served as Section Leader in the Plutonium Project at the University of California, 1943-44. Ph.D. in Chemistry. Research includes special projects in blood lipids, radioactive cholesterol, atherosclerosis, and coronary artery disease. Member, Phi Beta Kappa.

Sponsors: Rayburne W. Goen, M.D., Tulsa, and Samuel Goodman, M.D., Tulsa.

GEORGE C. GRIFFITH, M.D.
Los Angeles, California



Professor of Medicine and Coordinator of Cardiovascular Instruction, University of Southern California School of Medicine. Medical Degree, Jefferson Medical College, 1926. Interned Presbyterian Hospital of Philadelphia, 1926-27. For four years was preceptee

under Dr. James E. Talley of the Graduate School of Medicine, and resident in Medicine, Presbyterian Hospital. Diplomate, American Board of Internal Medicine. Member of the Editorial Board, *Journal of the American Geriatrics Society*. Secretary of the Scientific Council, American Heart Association. Fellow, American College of Physicians. Formerly President, California Heart Association, 1953-54. Member of the Board of Trustees, Good Hope Medical Foundation.

Sponsors: E. G. Hyatt, M.D., Tulsa, and Felix R. Park, M.D., Tulsa.

JOHN S. LUNDY, M.D.
Rochester, Minnesota



Senior Consultant, Section of Anesthesiology, Mayo Clinic. Professor of Anesthesiology, Mayo Foundation for Medical Education and Research, Graduate School, University of Minnesota. Diplomate and Past-President, American Board of Anesthesiology. Medical Degree, Rush Medical College, 1920. Interned Harper Hospital at Detroit, 1919-20. Fellow, American College of Anesthesiologists. Past-President, American Society of Anesthesiologists. Formerly Chairman, Section on Anesthesiology, American Medical Association. Member, American Society for Pharmacology and Experimental Therapeutics. Author of over 340 medical articles and textbooks in the field of Anesthesiology.

Sponsors: Howard A. Bennett, M.D., Tulsa, and H. B. Stewart, M.D., Tulsa.

MICHAEL K. O'HEERON, M.D.
Houston, Texas



Clinical Professor of Urology, Baylor University College of Medicine. Associate Clinical Professor of Urology, University of Texas Postgraduate School. Medical Degree, Washington University School of Medicine, 1935. Interned St. Louis City Hospital, 1935-36.

Resident in Urology, Presbyterian Hospital, Chicago, Illinois, 1936-40. Diplomate, American Board of Urology. Fellow, American College of Surgeons. Formerly Chairman of the Section on Urology, International College of Surgeons. Formerly President, Texas Urological Association. Area Consultant in Urology, United States Veterans Administration. Chief of Urology, St. Joseph's Hospital and Methodist Hospital of Houston. Author of numerous publications in the field of Urology.

Sponsors: Henry S. Browne, M.D., Tulsa, and Joseph Fulcher, M.D., Tulsa.

ERIC OLDBERG, M.D.
Chicago, Illinois

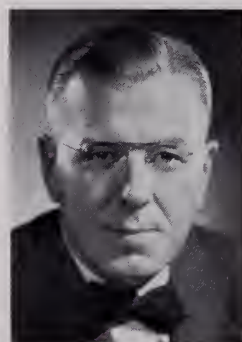


Professor and Chairman, Department of Neurology and Neurological Surgery, University of Illinois School of Medicine. Medical Degree, Northwestern University Medical School, 1927. Internship and surgical residencies, Peter Bent Brigham Hospital of Boston,

1927-30. Diplomate, American Board of Neurological Surgery. Member, American Surgical Association. Fellow, American College of Surgeons. Associate Editor, *Journal of Neuropathology*. Formerly President, Harvey Cushing Society. Member, Society for Experimental Biology. Member, Association for Research in Nervous and Mental Diseases. Formerly President, Chicago Neurological Society. Arthur of numerous reviews and articles.

Sponsors: Robert L. Imler, Jr., M.D., Tulsa, and H. M. McClure, M.D., Chickasha.

PAUL C. SWENSON, M.D.
Philadelphia, Pennsylvania



Formerly Professor and Chairman of the Department of Radiology, Jefferson Medical College, 1943-55. Medical Degree, University of Minnesota School of Medicine, 1926. Interned Gillette and Ancker hospitals of St. Paul, Minn., 1926-28. Residencies in

Radiology, University of Michigan Hospitals, Ann Arbor, Mich., 1928-30. Formerly member of the faculty, Columbia University College of Physicians and Surgeons, 1930-43. Diplomate, American Board of Radiology. Diplomate and Member of the Board of Chancellors, American College of Radiologists. Fellow, Radiological Society of North America. Member, American Roentgen Ray Society. Member, American Trudeau Society.

Sponsors: William M. Benzing, Jr., M.D., Tulsa, Lucien M. Pascucci, M.D., and William R. R. Looney, M.D., Tulsa.

Scientific Exhibits

JOSEPH W. KELSO, M.D. and JOSEPH W. FUNNELL, M.D.

Oklahoma City

Booth 1

Surgical Management of Carcinoma of the Cervix

A study of a proposed management of carcinoma of the cervix, illustrating the reasons, source of cases, and the results of nearly twelve years experience. Comprehensive anatomical drawings are a feature of the exhibit, winner of an Honorable Mention Award by the American Medical Association.

AVERILL STOWELL, M.D.

Tulsa

Booth 2

Neck, Shoulder, Arm Pain With Specific Reference to Scalenus Anticus Syndrome

An exhibit, presented with graphs, charts and anatomical reproductions to illustrate this modern problem.

OKLAHOMA DIVISION, AMERICAN CANCER SOCIETY

Oklahoma City

Booth 3

Exfoliative Cytology in the Diagnosis of Early Cancer

A summary of the historical development, research, methods of detection, and laboratory procedures are illustrated in this exhibit.

GILBERT L. HYROOP, M.D.

Oklahoma City

Booth 4

Plastic Surgery and Hand Surgery

An illustration of cases of plastic surgery showing pathology or deformity before operation and postoperative results. The section on hand surgery will show a sampling of cases of deformed hands before surgery and postoperative photographs which reveal improved cosmetic and functional results.

THOMAS O. HODGES, M.D., and S. M. GLASSER, M.D., United States Veterans Administration Hospital

Oklahoma City

Booth 5

Translumbar Aortography

This exhibit consists of original x-ray films and colored pictures showing examples of translumbar aortography. Mounted x-ray view boxes permit easy viewing of the x-ray films.

AMERICAN MEDICAL ASSOCIATION

Chicago, Illinois

Booth 6

Professional Liability

A factual study of the problems of the medical doctor and malpractice. Mr. Bernard Hirsh, member of the Law Department of the American Medical Associations, will be present to discuss the interesting features of the exhibit with convention visitors.

WILLIAM N. HARSHA, M.D., Department of Orthopaedics, University of Oklahoma School of Medicine, and

J. NEWTON OWENS, M.D., Pathologist, Bone and Joint Hospital

Oklahoma City

Booth 7

Diagnostic and Pathological Review of Various Synovial Abnormalities

This exhibit is a review of the accumulation of over 4,000 pathological specimens of synovial abnormalities. The review displays representative abnormal conditions as to gross, microscopic pathology. It is demonstrated by means of enlarged photomicrographs. It makes an extremely colorful and attractive exhibit which includes certain simple diagnostic tests upon synovial fluid.

WILLIAM N. HARSHA, M.D.

Oklahoma City

Booth 8

Anatomicalphysiological Explanations of Mechanical Back Pain

An animated skeleton and two manikins are used to demonstrate the physiological abnormalities which produce back pain along with rationale of therapy in these states.

OKLAHOMA DOCTORS HOBBY SHOW

Sponsored by the Woman's Auxiliary to the Oklahoma State Medical Association

Ivory Room, Mezzanine, The Moyo

Mrs. William R. R. Loney, Tulsa, Chairman

The leisure-time hobbies of Oklahoma physicians are presented in this interesting exhibit. Paintings, sculpture, models, weaving, woodwork, and mechanical crafts, plus many unusual collections—all executed by practicing medical doctors of the State—will be on display.

Commercial Exhibits

A. S. ALOE COMPANY St. Louis, Missouri

Booth 23

The A. S. Aloe Company will have on display a cross-section of its most complete line of physicians and laboratory equipment and supplies. Mr. William R. Jones and other Aloe representatives will appreciate the opportunity of discussing with you items of mutual interest.

AYERST LABORATORIES New York, N.Y.

Booth 11

The Ayerst exhibit features Cytoferin for quicker and greater response in iron deficiency anemia. Cytoferin is available in Tablet and Liquid form. Physicians are cordially invited to visit the Ayerst booth for information on Cytoferin and other Ayerst specialties. Ayerst representatives will be Mr. R. C. Hageman, Mr. E. C. Trueblood and Mr. V. V. Franklin.

BLUE CROSS-BLUE SHIELD **PLANS OF OKLAHOMA** Tulsa, Oklahoma

Booth 24

The Blue Cross-Blue Shield exhibit will be a "rest haven" for physicians in between meetings. Information and explanation of any phase of the Oklahoma program will be cheerfully given. Comments, suggestions and questions of physician visitors are always welcome. Mr. Carl E. Behle, Director of Professional Relations, will be in charge of the exhibit.

CARNATION COMPANY Los Angeles, California

Booth 13

Carnation Company welcomes friends of long standing as well as new members of the Oklahoma State Medical Association. At Booth 13, a refreshing drink of Carnation Instant Nonfat Milk will be served. Carnation representatives will be pleased to discuss with you the physician-researched

material for use in your practice as a service of the Carnation Company.

CIBA PHARMACEUTICAL PRODUCTS Summit, New Jersey

Booth 21

Ciba is featuring two prescription specialties—Ritalin, a new mild stimulant-antidepressant, and Doriden, a nonbarbiturate hypnotic-sedative. Ritalin raises depressed patients to normal levels of psychomotor activity without amphetamine-like over-stimulation or depressive rebound. Nonhabit-forming Doriden is already being widely used as a safe, barbiturate replacement. Representatives Wayne Garrison and Donald E. Laird will be present to answer queries on these very effective agents.

COCA COLA COMPANY Tulsa, Oklahoma

Booth 6

Coca-Cola will be served free all day, every day from our convention booth. Every member of the Oklahoma State Medical Association and the exhibitors are welcome to drop by and have a refreshing Coke at any time. To serve you will be Mr. J. M. Shelton and Mr. and Mrs. C. H. Jordan.

DOHO CHEMICAL CORPORATION New York, N.Y.

Booth 8

Mr. Louis Cassell, representative for Doho Chemical Corporation, will be pleased to exhibit Auralgan, ear medication in Otitis Media and removal of Cerumen; Otosmosan, effective, non-toxic fungicidal and bactericidal (gram negative-gram positive) in the suppurative and aural dermatomycotic ears; Rhinalgan, nasal decongestant free from systemic or circulatory effect and equally safe to use on infants as well as the aged; New Larylgan, soothing throat spray and gargle for infectious and non-infectious sore throat involvements. Mallon Chemical Corporation, subsidiary of Doho, is also featuring

Rectalgan, liquid topical anesthesia for relief of pain and discomfort in hemorrhoids, pruritus and perineal suturing, and Dermo-plast, Aerosol freon propellant spray for fast relief of surface pain, itching, burns and abrasions.

EATON LABORATORIES
Norwich, New York **Booth 31 (Lobby)**

Oklahoma physicians will be interested in Furadantin (R), one of the most effective and rapidly acting agents available at this time for treatment of prostatitis and acute and chronic urinary tract infections. Furadantin has specific affinity for the urinary tract, producing antibacterial concentration in 30 minutes. Five years of extensive use demonstrate negligible development of bacterial resistance. Tricofuron (R) Vaginal Suppositories and Powder are highly effective in the treatment of trichomonal vaginitis and the accompanying secondary bacterial infections. Eaton representatives will be Mr. Curtis White and Mr. E. E. Sisney.

GENERAL ELECTRIC X-RAY COMPANY
Tulsa, Oklahoma **Booth 12**

Representatives of General Electric Company, X-Ray Department, would be pleased to acquaint you with the very latest models of combination Radiographic and Fluoroscopic X-Ray equipment, employing the use of high voltage generators, full automatic spot film devices arranged for photo-timing, improved Bucky diaphragms, overhead tube hangers and many other improved features, including new model rotating anode tube units. Too, may we explain our Maxiservice (Rental) Plan which is most acceptable to doctors, clinics and hospitals throughout the country. Stop by and pay us a visit. G. E. representatives will include Mr. C. A. Bohan, Mr. E. R. Rector, Mr. J. O. Jones, Mr. V. R. Troop, and Mr. Guy L. Shirk.

GREB X-RAY COMPANY
Oklahoma City, Oklahoma **Booth 2**

Grebe X-Ray Company, distributors of Picker-Waite X-Ray Equipment, Liebel Flarsheim Short Wave Equipment, Hanovia Ultra Violet Lamps, Beck-Lee Electrocardiographs, and other fine equipment and services invite you to visit their exhibit.

HOLLAND-RANTOS COMPANY
New York, N.Y. **Booth 29 (Lobby)**

Physicians interested in Medical Contraception are invited to discuss with H-R representatives James T. Bankhead and Charles E. Holt latest information on laboratory and clinical data concerning efficacy of Koromex products. Also featured will be the Koro-Flex Diaphragm, the trichomonocidal, fungicidal and bactericidal Nylmerate Jelly and Solution Concentrate, as well as medicated Hollandex Silicone Skin Ointment with natural vitamins A & D.

R. P. KINCHELOE COMPANY
Dallas, Texas **Booth 38 (Lobby)**

Information on Keleket and Continental X-Ray Apparatus, Cambridge Electrocardiographs and Liebel-Flarsheim physical medicine and BMR equipment will be shown. The R. P. Kincheloe Company has specialized in electro-medical sales in the Southwest since 1919 and is renowned for its expert technical service. To serve you at the booth will be Mr. Joseph F. Walsh and Mr. H. L. Staples.

ELI LILLY AND COMPANY
Indianapolis, Indiana **Booth 20**

You are cordially invited to visit the Lilly exhibit located in Space Number 20. The display will contain information on recent therapeutic developments. Lilly sales people will be in attendance and welcome your questions about Lilly products. Mr. J. P. Nail will be in charge, assisted by Mr. A. S. Dustin and Mr. E. W. Griffith.

J. B. LIPPINCOTT COMPANY
Philadelphia, Pennsylvania **Booth 4**

J. B. Lippincott Company presents for your approval a display of professional books and journals geared to the latest and most important trends in current medicine and surgery. These publications, written and edited by men active in clinical fields and teaching, are a continuation of more than 100 years of traditionally significant publishing. Mr. J. L. Rosecrants will be the Lippincott representative.

**MERKEL X-RAY COMPANY
MID-CONTINENT SURGICAL
SUPPLY COMPANY
Tulsa, Oklahoma**

Booth 1

Merkel X-Ray Company and the Mid-Continent Surgical Supply Company display will include the latest in small surgical instruments, sterilizers for small office practice, electrocardiographs, ultrasonic units, illuminators for viewing x-ray film, and some x-ray accessory items. To acquaint you with these fine products are Mr. Fred C. Merkel, Mr. F. W. Kirbey, Mr. Louis Rieves, Mr. Norman Kulsrud, Mr. Charles Smith, Mr. Howard Childers, Mrs. Fred Cozart, and Mr. Bill Terbush.

**V. MUELLER COMPANY
Dallas, Texas**

Booth 35 (Lobby)

V. Mueller Company will exhibit the newer instruments and demonstrate the procedures. Physicians are invited to discuss these products with Mr. Ford Dixon and Mr. Porter Marr.

**OKLAHOMA PHYSICIANS'
SUPPLY COMPANY**

Oklahoma City, Oklahoma Booth 34 (Lobby)

A general line of physicians' surgical and hospital supplies and equipment are offered by Oklahoma Physicians' Supply Company for inspection by convention visitors. Representatives are Mr. Ray W. Broadfoot, Mr. L. A. (Bud) Wamsley, Mr. Bill White, and Mr. Bill Geter.

**ORTHO PHARMACEUTICAL CORPORATION
Raritan, New Jersey**

Booth 36 (Lobby)

Ortho cordially invites you to Booth 36 where obstetrical and gynecological pharmaceuticals will be featured. Tritheon Aminotroazole Tablets for the oral treatment of trichomoniasis in the male and female will be given particular emphasis. Rarical Iron-Calcium Tablets, a compound for use in iron-deficiency anemias and in all cases requiring calcium supplementation, will also be displayed. Ortho representatives Fred Hendricks and William B. McDonald welcome this opportunity to discuss their products with you.

**J. A. MAJORS COMPANY
New Orleans, Louisiana**

Booth 18

The publications of the W. B. Saunders

Company will be available for your examination, including: 1957 Current Therapy; new edition of Dorland Medical Dictionary; Friedberg's Diseases of the Heart; Nada's Pediatric Cardiology; Bierwaltes' Clinical Use of Radioisotopes; Artz's Management of Burns; Tracy's The Doctor As A Witness; and many others for the practicing physician. Mr. Jack McClendon and Mr. Bruce Thompson will be Majors representatives.

**MEAD JOHNSON & COMPANY
Evansville, Indiana**

Booth 27

In the Mead Johnson booth, specially trained representatives G. Richard Brown and William McMinimy will be pleased to tell you about these product "families": (1) The Mead Johnson Formula Products Family—including ready-to-use Lactum and Olac for routine infant feeding, as well as Dextro-Maltose; (2) The Deca Vitamin Family—three convenient dosage forms for comprehensive vitamin protection of infants and children; (3) The Colace Family—providing a new approach in preventing and treating constipation by keeping stools soft for easy passage.

**MEDCO PRODUCTS COMPANY
Tulsa, Oklahoma**

Booth 25

Medco Products Company will present the Medco-Sonlator, providing a new concept in therapy by combining muscle stimulation and ultra-sound simultaneously through a single Three-Way Sound Applicator. The Medco-Sonlator is a distinct advance in the effectiveness of physical therapy in your office or hospital. A few minutes spent with Medco representatives, Mr. Mark E. DeGroff and Mr. Ellison Harvey, will prove of value to your practice.

**MELTON-MYERS SURGICAL
SUPPLY COMPANY
Tulsa, Oklahoma**

**THE MELTON COMPANY
Oklahoma City, Oklahoma**

Booth 15

Convention visitors are invited to inspect a display of modern surgical and medical supplies offered by two of Oklahoma's leading surgical supply firms. Representatives will include Mr. Murray L. Myers, Mr. Bob J. Andrews, Mr. Roy W. Cody, and Mr. Fred E. Schrandt.

PARKE, DAVIS & COMPANY
Detroit, Michigan

Booth 28

Medical service members of the staff of Parke, Davis & Company will be in attendance for consultation and discussion of various products of particular interest to members of the Association. Important specialties, such as Chloromycetin, Eldec, Celontin, Benadryl, Dilantin Suspension, Oxyel, and Vitamins will be featured. To serve you at the booth will be Mr. G. W. Walker, Mr. S. N. Downs, and Mr. Lloyd Helms.

PET MILK COMPANY
St. Louis, Missouri

Booth 22

We will be pleased to have you stop and discuss the variety of time-saving material available to busy physicians. Our representatives will be on hand to discuss the merits of Pet Evaporated Milk for infant feeding and Instant Pet Nonfat Dry Milk for special diets. A miniature Pet Evaporated Milk Can will be given to all visitors.

R. J. REYNOLDS TOBACCO COMPANY
Winston-Salem, North Carolina

Booth 7

Welcome to the R. J. Reynolds Tobacco Company exhibit! You are cordially invited to receive a gift cigarette case (monogrammed with your initials) containing your choice of Camel, Winston Filter, Menthol Fresh Salem, or Cavalier King Size cigarettes. Your Reynolds representatives will be Mr. L. W. Vaught, Mr. H. P. Ruble, and Mr. R. F. Fletcher.

RIKER LABORATORIES
Los Angeles, Calif.

Booth 37 (Lobby)

The Riker Laboratories exhibit will feature Medihaler, a measured-dose principle in the inhalation treatment of asthma, other broncho-spastic conditions, angina pectoris, and a new addition for nasal congestion. In addition, the exhibit presents Pentoxylon, the drug which affords long-term relief from attacks of angina pectoris and the Riker antihypertensive armamentarium—Rauwiloid, Rauwiloid plus Veriloid, and Rauwiloid plus Hexamethonium. Riker representatives will be Mr. Charles R. Adams, Mr. Wynnell Chism, and Mrs. James Mathis.

A. H. ROBINS COMPANY
Richmond, Virginia

Booth 33 (Lobby)

The A. H. Robins Company exhibit spotlights Donnatal. This "most prescribed" of all antispasmodic sedatives is available not only in tables, capsules and palatable Elixir, but also in long-acting Extentabs. Also featured: Allbee with C, capsules providing "saturation dosage" of B complex factors and ascorbic acid; Donnagesic Extentabs; Entozyme tablets; Robalate tablets and Liquid. To answer your questions will be Robins representatives Edwin G. Proctor, Charles A. Faith, and Clifton D. Wheeler, Jr.

J. B. ROERIG AND COMPANY
Chicago, Illinois

Booth 39 (Lobby)

J. B. Roerig and Company will feature Atarax, the new "Peace of Mind" drug. It's an all new chemical and is specially indicated for the "more normal" person, to bring relief from the common everyday tensions and anxieties. Co-featured with Atarax will be Bonadoxin, the anti-emetic for relief of nausea and vomiting of pregnancy; also effective in post-anesthetic nausea, Meniere's Syndrome and postradiation sickness. Literature and samples at the booth will be available from Mr. George Wallace, Mr. Joe Bass, and Mr. Jimmie Traw.

SANDOZ PHARMACEUTICALS
Hanover, New Jersey

Booth 5

Sandoz Pharmaceuticals will offer a variety of fine pharmaceuticals for effective use in everyday practice. You are invited to visit with Mr. George M. Clulow, Sandoz representative, for an interesting discussion of these leading products.

SCHERING CORPORATION
Bloomfield, New Jersey

Booth 26

Members of the Oklahoma State Medical Association and their guests are cordially invited to visit the Schering exhibit where new therapeutic developments will be featured. Schering representatives Ralph Couch and Arthur Aldrich will be present to welcome you and discuss with you these products of our manufacture.

SEALY SOUTHWEST**Fort Worth, Texas****Booth 32 (Lobby)**

See the famous Sealy Posturepedic Innerspring and Foundation designed under the supervision of the American Medical Association—now on display at the Sealy Booth. Register for the free drawing for physicians. Winner will receive a Sealy Posturepedic Innerspring and Foundation absolutely free. Mr. Neil Barton, Sealy representative, welcomes your visit.

G. D. SEARLE & COMPANY**Chicago, Illinois****Booth 16**

You are cordially invited to visit the Searle booth where Mr. Frank R. Cotten, Mr. Tom R. Sellers, Mr. J. A. Bradley, and Mr. J. B. Saunders will be happy to answer any questions regarding Searle Products of Research. Featured will be Nilevar, the new anabolic agent; Rolicton, the new safe, non-mercurial oral diuretic; Vallestiril, the new synthetic estrogen with extremely low incidence of side reactions; Banthine and Pro-Banthine, the standards in anti-cholinergic therapy; and Dramamine, for the prevention and treatment of motion sickness and other nausea.

E. R. SQUIBB & SONS**New York, N.Y.****Booth 9**

E. R. Squibb & Sons has long been a leader in development of new therapeutic agents for prevention and treatment of disease. The results of our diligent research are available to the Medical Profession in new products or improvements in products already marketed. At Booth 9 we are pleased to present up-to-date information on these advances for your consideration. Representatives are Mr. W. A. Cates, Mr. W. D. Millwee, Mr. A. M. Sayles, and Mr. R. L. Meanor.

ST. PAUL-MERCURY INDEMNITY COMPANY**St. Paul, Minnesota****Booth 3**

Mr. Forrest O. Cress and his associates welcome doctors to the St. Paul - Mercury booth where information and details on the Company's group malpractice program and other types of insurance will be available.

U. S. VITAMIN CORPORATION**New York, N.Y.****Booth 19**

Our exhibit will feature Arlidin, an en-

tirely new, relatively safe and effective vasodilator drug with three unique pharmacologic actions: (1) dilates predominately small blood vessels of skeletal muscle, (2) increases circulating blood volume, (3) increases cardiac output. Thus, Arlidin (HCl. NNR) is indicated in treating intermittent claudication and a wide range of functional and obliterative disorders of peripheral vascular insufficiency. Professional literature and samples will be available from our representatives, Mr. John T. Wilbourn and Mr. E. E. Jones.

UPJOHN COMPANY**Kalamazoo, Michigan****Booth 14**

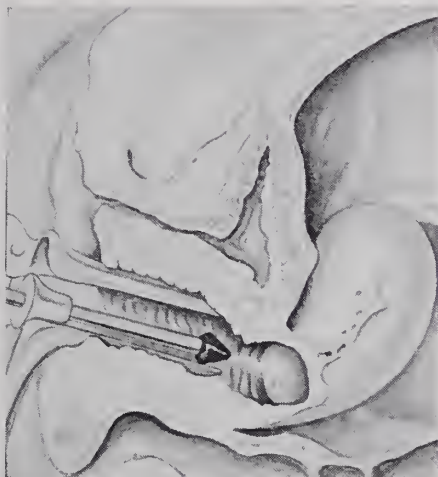
Members of the medical profession are invited to visit the Upjohn booth where Mr. Preston Walker and Mr. Dorwin Lamkin will be prepared to discuss Upjohn's many fine products.

WARREN-TEED PRODUCTS COMPANY**Columbus, Ohio****Booth 10**

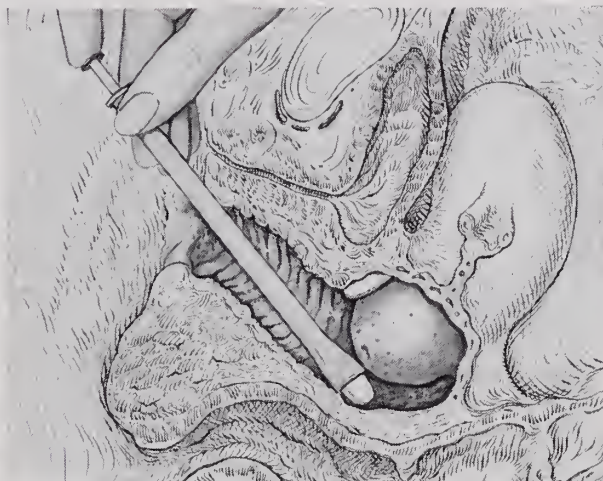
The Warren-Teed Products Company is featuring three new therapeutic agents: Modane—a nutritional deconstipant, providing overnight relief and rehabilitation of the atonic bowel; Cal-O-B—a soluble and assimilable mineral supplement designed to assure increased skeletal metabolism; and Axofo— a synergistic combination of proven analgesics, providing non-narcotic high level pain control. Mr. R. E. Loftus, Mr. A. L. Mallory, and Mr. B. D. Wilder will be in the Warren-Teed Booth to serve you.

WINTHROP LABORATORIES**New York, N.Y.****Booth 17**

The Winthrop booth will feature Reserpine (0.15 mg.) with Mebaral (30 mg.) tablets, new more effective sedative, tranquilizer and antihypertensive which produces immediate and sustained tranquility through two sites of central nervous action—cortical and hypothalamic. Also new A.P.C. c Demerol tablets for potentiated pain relief. Each tablet contains aspirin 3 grains, phenacetin 2½ grains, caffeine ½ grain with Demerol hydrochloride 30 mg. They do not cause constipation or interference with micturition. Winthrop representatives are Mr. H. L. (Jack) Wood, Mr. O. A. Wasem, and Mr. D. E. Prater.



Powder Insufflation



Tablet Insertion

Floraquin® Rebuilds the Defense Mechanism in Vaginitis

Combined office and home treatment with Floraquin provides a comprehensive regimen which encourages restoration of the normal "acid barrier" to pathogenic infection.

Vaginal secretions normally show a high degree of protective acidity (pH 3.8 to 4.4). When this "acid barrier" is disturbed, growth of benign Döderlein bacilli is inhibited and that of pathogens encouraged. Floraquin not only provides an effective protozoacide and fungicide (Diodoquin®) destructive to pathogenic trichomonads and yeast, but also furnishes sugar and boric acid for reestablishment of the normal vaginal acidity and regrowth of the normal protective flora.

Suggested Office Floraquin Insufflation

"... the vagina is treated daily by swabbing with green soap and water, drying and insufflation of Floraquin powder."*

Suggested Home Floraquin Treatment

"The patient is also issued a prescription for Floraquin vaginal suppositories which she is instructed to insert high into the vagina each evening. On the morning following each application of these suppositories, the patient should take a vinegar water douche. . . ."

A Floraquin applicator is supplied with each box of 50 Floraquin tablets. G.D. Searle & Co., Chicago 80, Illinois, Research in the Service of Medicine.

*Williamson, P.: Trichomonad Infestation, M. Times 84:929 (Sept.) 1956.

SEARLE

Woman's Auxiliary



Mrs. Livingston



Mrs. Wolff



Mrs. Craig



Mrs. Robinson

SUNDAY, MAY 5, 1957

THEME: Health is Our Greatest Heritage

All members and visiting physicians' wives are welcome to all activities.

1:00 p.m. to 3:00 p.m.—REGISTRATION AND INFORMATION, Mezzanine Floor, Room A, Mayo.

3:00 p.m. to 5:00 p.m.—TEA—Courtesy of the Auxiliary to the Tulsa County Medical Society, Terrace Room, Mayo Hotel. Honoring Mrs. Paul C. Craig, President-Elect of the Woman's Auxiliary to the American Medical Association; Mrs. Oscar W. Robinson, President of Woman's Auxiliary to the Southern Medical Association; State Officers and visiting wives of members of the Oklahoma State Medical Association; and the wives of guest speakers.

7:00 p.m.—EXECUTIVE BOARD MEETING, Metropolitan Room, Mayo Hotel, Mrs. L. Gordon Livingston presiding.

MONDAY, MAY 6, 1957

THEME: Health is Our Greatest Heritage

8:30 a.m.—PAST PRESIDENT'S BREAKFAST, English Room, Mayo Hotel, Mrs. Hugh Perry, hostess.

9:00 a.m. to 4:00 p.m.—REGISTRATION AND INFORMATION, Mezzanine Floor, Room A, Hospitality Room, Mezzanine Floor, Mayo Hotel, Coffee and Rolls served 9:00 to 10:00 a.m.

10:00 a.m.—GENERAL MEETING—Mrs. L. Gordon Livingston presiding, Founders Room, south end of Mezzanine, Mayo Hotel.

CALL TO ORDER: Mrs. L. Gordon Livingston, President of the Woman's Auxiliary to the Oklahoma State Medical Association.

INVOCATION: Mrs. E. Clude Mohler, Ponca City.

PLEDGE OF LOYALTY: Mrs. H. C. Wheeler, First Vice-President, McAlester.

"I pledge my loyalty and devotion to the Woman's Auxiliary to the American Medical Association. I will support its activities, protect its reputation and ever sustain its high ideals."

WELCOME: Mrs. Harold A. White, President-Elect of the Woman's Auxiliary to the Tulsa County Medical Society.

GREETINGS: Doctor H. M. McClure, President of the Oklahoma State Medical Association.

ROLL CALL BY COUNTIES: Mrs. Virgil Ray Forester, Secretary-Treasurer of the Woman's Auxiliary to the Oklahoma State Medical Association.

READING AND ADOPTION OF MINUTES: Mrs. Virgil Ray Forester.

TREASURER'S REPORT:

INTRODUCTIONS: State Officers, Committee Chairmen, Convention Chairmen, Pages and Guests.

GUEST SPEAKER: Mrs. Oscar W. Robinson, Paris, Texas, President of Woman's Auxiliary to the Southern Medical Association. ADDRESS: "Public Relations of the Doctor's Wife."

REPORT OF NOMINATING COMMITTEE: Mrs. John Powers Wolff, President-Elect, Woman's Auxiliary to the Oklahoma State Medical Association.

MEMORIAL SERVICE: Mrs. Emry G. Hyatt,
Tulsa

Mrs. George H. Garrison,
Oklahoma City

ANNOUNCEMENTS: Mrs. Charles G. Stuard,
Convention Chairman.

1:00 p.m.—LUNCHEON—STYLE SHOW by Nan
Pendleton Shop, Topaz Room, Tulsa Hotel. Mrs.
Milton L. Berg, President of the Woman's Aux-
iliary to the Tulsa County Medical Society, Pre-
siding.

MUSIC:

INVOCATION: Mrs. Virgil Ray Forester, Okla-
homa City.

6:00 to 9:00 p.m.—BUFFET SHORE DINNER, Blue
Cross-Blue Shield Building, Courtesy of Blue
Cross-Blue Shield.

TUESDAY, MAY 7, 1957

THEME: Health is Our Greatest Heritage

9:00 a.m. to 12:00 noon—REGISTRATION AND IN-
FORMATION, Mezzanine Floor, Room A, Mayo
Hotel. Hospitality Room, Room A, Mezzanine.
Coffee and rolls served 9:00 to 10:00 a.m.

10:00 a.m.—GENERAL MEETING: Mrs. L. Gordon
Livingston presiding, Founders Room, south end
of Mezzanine Floor.

CALL TO ORDER: Mrs. L. Gordon Livingston,
President.

INVOCATION: Mrs. H. M. McClure, Chickasha.

PLEDGE OF LOYALTY: Mrs. James P. Luton,
Second Vice-President, Oklahoma City.

REPORT OF CREDENTIALS: Mrs. William
Ray Turbow, Tulsa.

ROLL CALL OF VOTING DELEGATES: Mrs.
Virgil Ray Forester.

GUEST SPEAKER: Doctor John F. Burton,
President-Elect, Oklahoma State Medical Asso-
ciation.

GUEST SPEAKER: Mrs. Paul C. Craig, Wy-
omissing, Pennsylvania, President-Elect of the
Woman's Auxiliary to the American Medical
Association. ADDRESS: "Looking for Attic
Treasures."

PRESENTATION OF REPORTS OF STATE OF-
FICERS AND COUNTY PRESIDENTS:

UNFINISHED BUSINESS:

NEW BUSINESS:

REPORT OF BUDGET AND FINANCE COM-
MITTEE: Mrs. John A. Cunningham, Oklahoma
City.

RESOLUTIONS: Mrs. Millard L. Henry, Mc-
Alester.

ELECTION OF OFFICERS AND DELEGATES:

INSTALLATION OF OFFICERS: Mrs. E. Clude
Mohler, Past President of the Woman's Auxili-
ary to Oklahoma State Medical Association.

1:00 p.m.—LUNCHEON: Founders Room, Mayo Ho-
tel.

POST SCHOOL OF INSTRUCTION AND CON-
VENTION BOARD MEETING: Mrs. John Pow-
ers Wolff, Presiding.

GUEST SPEAKER: Mrs. Paul C. Craig, Wy-
omissing, Pennsylvania. ADDRESS: "The Ways
We Work Together."

6:30 p.m. to 1:00 a.m.—ANNUAL PRESIDENT'S IN-
AUGURAL BALL. Social Hour, Dinner and
Dance, Crystal Ballroom, Mayo Hotel. Shep
Field's Orchestra.

CONVENTION COMMITTEES

Convention Chairman: Mrs. Charles G. Stuard, Tulsa
Headquarters and Registration: Mrs. Sam R. Turner
Credentials: Mrs. William Ray Turnbow
Hospitality: Mrs. Raymond S. Echols
Tickets: Mrs. Richard E. McDowell
Transportation: Mrs. Frank L. Flack
Luncheon: Mrs. William Buchan
Style Show: Mrs. Vance Lucas
Publicity: Mrs. Harlan Thomas
Past President's Breakfast: Mrs. Hugh Perry
Pianist: Mrs. Frank G. Stuart
Our Doctors Hobby Show: Mrs. W. R. R. Loney
Tea: Mrs. Robert L. Anderson

OKLAHOMA STATE MEDICAL ASSISTANTS SOCIETY

TENTATIVE SCHEDULE OF EVENTS

FRIDAY MAY 3, 1957

Reception for out of town guests-----Western Room, Hotel Tulsa

SATURDAY, MAY 4—Morning Session

Registration

Call to Order-----Katherine Meeks, Stillwater
(President, O.S.M.A.S.)

Invocation

Greetings-----Betty Church, Tulsa
(Convention Chairman)

Official Business: Minutes 1956 Convention. Previous minutes Board Meetings.

Speaker-----Miss Nancy Kline, Philadelphia, Pa.
(Public Relations Dept., Smith, Kline & French Laboratories)

Luncheon-----Blue Cross-Blue Shield

Panel Discussion of "Medicare"

SATURDAY, MAY 4—Afternoon Session

Roll Call by Counties, Officers Reports,

Presentation of Nomination Committee Slate.

"Greetings From the Oklahoma State Medical Association"-----H. M. McClure, M.D.
(President, Oklahoma State Medical Association)

Announcement of election results.

SATURDAY, MAY 4—Evening

Social Hour-----Tulsa Medical Service Association

Banquet Dinner

Welcome and Introduction of Medical Advisors-----G. R. Russell, M.D.
(President, Tulsa County Medical Society)

Response

Introduction of Officers and Guests-----Katherine Meeks, President

Guest Speaker-----Maurice Tinterow, M.D., Wichita
(Advisor to The American Association of Medical Assistants)

Dance-----Billy Pitcock and his Orchestra

SUNDAY, MAY 5—Morning Session

Invocation

Breakfast-----Courtesy Medical Credit Bureau of the Tulsa County Medical Society

Guest Speaker-----David B. Allman, M.D.
(President-Elect, A.M.A.)

Panel Discussion—"Medicine of Tomorrow"-----Maurice Tinterow, M.D., Moderator
Wm. Benzing, Jr., M.D., Dixon Burns,
M.D., R. W. Goen, M.D., Martin Leibovitz, M.D., and Milford S. Ungerman, M.D.

Installation of New Officers

Luncheon----(courtesy of Barnes, Curtains, Getmans, Professional, Prathers, Scott-Robinson and Utica Square Pharmacies.)

SUNDAY, MAY 5—Afternoon Session

Address-----Hazel Wade, Tulsa
(1957-1958 President, O.S.M.A.S.)

Business Session

Presentation of Gifts

Award of Achievement Trophy to Winning County

Related Meetings

OKLAHOMA STATE SOCIETY OF ANTHESIOLOGISTS

The Oklahoma State Society of Anesthesiologists will meet Sunday, May 5, at the Oakes Country Club in Tulsa. Registration begins at 10:30 a.m.

Guest speaker for the occasion will be John Lundy, M.D., Professor Emeritus of Anesthesiology at Mayo Foundation, Rochester, Minnesota.

10:30 a.m. Registration

11:00 a.m. "The Relief of Pain," John Lundy, M.D.

LUNCHEON at the Oakes Country Club

2:30 p.m. "Anesthesia for Surgical Operations," John Lundy, M.D.

Officers who will serve from May 1957 to May 1958 are: William Renfrow, M.D., President, Oklahoma City; Grace Hassler, M.D., Secretary-Treasurer, Oklahoma City.

OKLAHOMA ORTHOPEDIC ASSOCIATION

The meeting of the Oklahoma Orthopedic Association is scheduled for 10:00 a.m. Sunday, May 5, in the Western Hills Lodge at Sequoyah State Park.

OKLAHOMA SOCIETY OF INTERNAL MEDICINE

The Oklahoma Society of Internal Medicine will hold its first annual meeting in Tulsa on Saturday, May 4.

OKLAHOMA STATE MEDICAL ASSISTANTS SOCIETY

The Oklahoma State Medical Assistants Society will meet in Tulsa on May 3-4-5, 1957.

UNIVERSITY OF TENNESSEE ALUMNI ASSOCIATION

The University of Tennessee Alumni Association will enjoy luncheon together at 1:00 p.m. at the Alvin Hotel in Tulsa, May 5.


OKLAHOMA RHEUMATISM SOCIETY

The Oklahoma Rheumatism Society will meet in The Mayo Hotel, Tulsa, on Sunday, May 5. Registration will begin at 8:30 a.m.; the meeting will convene promptly at 9:00 a.m. Guest speaker for the occasion will be Otto Steinbrocker, M.D., of the Disease of Bone and Joint Hospital, New York City, N. Y.

OKLAHOMA DERMATOLOGY SOCIETY

The Oklahoma Dermatology Society will held its Annual Meeting on Sunday, May 5, in Tulsa. There will be presentation of clinical cases at the Community Welfare Building, 602 South Cheyenne, at 10:00 a.m. This will be followed by a discussion of the cases. Luncheon will be at The Mayo Hotel with a short business meeting and election of officers following.

The presentation of cases and discussion are open to all interested physicians. However, those planning to attend as guests should make reservations with Paul O. Shackelford, M.D., 615 Medical Arts Building, CHerry 2-4372, Tulsa.



a major
advance
in sulfa
therapy

KYNEX* ■ ■ ■ ■ ■
Sulfamethoxypyridazine Lederle

KYNEX is an entirely new, readily soluble, single sulfonamide exhibiting excellent antibacterial action at radically reduced dosage.

KYNEX offers desirable clinical advantages hitherto not obtained by any related drug—

LOW DOSAGE: a total maintenance dose of only 2 tablets daily.

HIGH SOLUBILITY: prompt absorption, adequate diffusion into body fluid and tissue.

PROLONGED ACTION: therapeutic blood levels within the hour, blood concentration peaks within 2 hours—5-10 mg. per cent blood levels persist 24 hours after single oral dose of 1 Gm.



cuts dosage 75%

BROAD-RANGE EFFECTIVENESS: KYNEX is particularly efficient in urinary tract infections due to sulfonamide-sensitive organisms, including *E. coli*, *Aerobacter aerogenes*, paracolon bacilli, streptococci, staphylococci, Gram-negative rods, diphtheroids and Gram-positive cocci.

SAFETY: KYNEX offers a margin of clinical safety based on low required dosage, solubility, slow excretion rate. Although KYNEX Sulfamethoxypyridazine is a sulfonamide derivative and the usual precautions regarding such drugs should be observed, the low daily dose of 1.0 Gm. is all that is required for the therapeutic blood levels. No increase in dosage is recommended.

CONVENIENCE: The low dose of 1 Gm. (2 tablets) per day offers optimal convenience and acceptance to patients.

EACH TABLET CONTAINS: sulfamethoxypyridazine . . 0.5 Gm. (7½ grains). **AVAILABLE:** Bottles of 24 and 100 Tablets.

COMING MEETINGS

CONSECUTIVE CASE CONFERENCE

April 14, 1957

Veterans Administration Hospital
Oklahoma City, Oklahoma

Sponsored by Oklahoma Trudeau Society and
Oklahoma Chapter, American College of Chest Physicians

Guests of Conference:

I. D. BARONOFSKY, M.D.

Clinical Professor of Surgery, College of Physicians
and Surgeons, New York, New York

H. WILLIAM HARRIS, M.D.

Associate Professor of Medicine, University of Utah
School of Medicine, Salt Lake City, Utah

9:00-10:30 a.m. Ten Consecutive cases discharged
MHB who had a relapse of their tuberculosis.
Western Oklahoma Tuberculosis Sanatorium, Glenn
P. Dewberry, M.D., Clinton.

10:45-11:15 Ten Consecutive non-tuberculosis admis-
sions, beginning January 1956. Eastern Oklahoma
Tuberculosis Sanatorium, F. P. Baker, M.D.,
Talihina.

1:30-2:45 Ten Consecutive discharges showing dif-
fuse pulmonary fibrosis. VA Hospital, Oklahoma
City, James R. Lowell, M.D.

3:00-4:30 Ten Consecutive plumbages for pulmonary
tuberculosis. Shawnee Indian Hospital, Robert
M. Saylor, M.D., Shawnee.

4:45 Critique and Summary
H. William Harris, M.D., and
I. D. Baronofsky, M.D.

SOUTHWESTERN SURGICAL CONGRESS

April 15-16-17, 1957

Broadview Hotel, Wichita, Kansas

SUNDAY

10:00 a.m. Budget and Finance Committee Meeting

11:00 a.m. Council Meeting

1:00 to 4:00 p.m. Registration

MONDAY

8:00 a.m. Registration

8:50 a.m. Announcements and Invocation

9:00-12 noon Scientific Session including
Illustrated Hour 11:00 a.m. to 12 noon

10:00 a.m. Ladies Coffee

12:20 p.m. Roundtable Luncheon

2:00 p.m. to 3:00 p.m. Panel Discussion

3:00 p.m. to 4:20 p.m. Scientific Session

6:30 p.m. Cocktails

8:00 p.m. Banquet and Special Entertainment, Pe-
troleum Club.

TUESDAY

7:30 to 9:00 a.m. Breakfast Meeting. Including
presentation and discusson of three scientific
papers.

9:00 a.m. to 12:00 noon Scientific Session. Includ-
ing Illustrated Hour 11:00 a.m. to 12:00 noon.

12:00 noon Ladies Luncheon and Entertainment.

12:15 to 1:45 p.m. Roundtable Luncheon.

2:00 to 3:00 p.m. Panel Discussion.

3:00 p.m. Presidential Address and Congress Busi-
ness Session.

5:15 to 5:50 p.m. Buses leave Hotel Broadview for
Boeing Airplane Plant.

6:00 p.m. Banquet, Boeing Airplane Plant. Con-
ducted tour through plant after dinner.

WEDNESDAY

7:30 to 9:00 a.m. Breakfast Meeting including pres-
entation and discussion of three scientific papers.

9:00 a.m. to 12 noon Scientific Session.

10:00 a.m. to 12 noon Women's Coffee, Wichita Art
Association.

12:15 to 1:45 p.m. Roundtable Luncheon.

2:00 to 3:00 p.m. Panel.

3:00 to 4:00 p.m. Scientific Session.

The University of Texas Postgraduate School of Medicine

A SERIES OF CLINICS AND LECTURES

April 17, 1957

Texas Medical Center Houston, Texas

Associate Sponsor: Houston Heart Association

The University of Texas Postgraduate School of
Medicine is honored to announce the JAMES J. and
UNA TRUITT LECTURER for the year 1957, DR.
PAUL DUDLEY WHITE, Clinical Professor of Medi-
cine, Harvard Medical School, Director, National Ad-
visory Heart Council, President, International Society
of Cardiology.

PROGRAM SCHEDULE*

WEDNESDAY, APRIL 17, 1957

METHODIST HOSPITAL STAFF SUITE

Dr. Hatch W. Cummings, Jr., Presiding

8:00 a.m.-9:30 a.m.—Case Presentations

TEXAS CHILDREN'S HOSPITAL AUDITORIUM

Dr. Paul Ledbetter, Presiding

Dr. Russell J. Blattner, Co-Presiding

10:00 a.m.-11:30 a.m.—Case Presentations

BAYLOR UNIVERSITY COLLEGE OF MEDICINE
AUDITORIUM

Dr. James A. Greene, Presiding

3:00 p.m.-4:00 p.m.—Clinical Pathological Conference
HOUSTON HEART ASSOCIATION

Doctors Club—Jesse H. Jones Library Building

Mr. George M. Irving, Presiding

5:30 p.m.-8:00 p.m.—Dinner Honoring Dr. White**

JAMES J. and UNA TRUITT LECTURE

Auditorium—Jesse H. Jones Library Building

Dr. Melvin A. Casberg, Presiding

8:15 p.m.—Address: "How Can We Advise Our Youth
of Tomorrow to Avoid The Heart Diseases of To-
day?"

*Physicians and their guests are cordially invited
to attend any or all of these sessions. Attendance will
be limited by the capacity of the Auditoriums.

**Reservations must be obtained from the Execu-
tive Secretary, Houston Heart Association, Jesse H.
Jones Library Building, Houston, Texas, or call
Jackson 2-0425.

**SPECIAL POSTGRADUATE COURSE
UNIVERSITY OF OKLAHOMA
SCHOOL OF MEDICINE**

Medical School Auditorium

April 19-20, 1957

The Department of Psychiatry and Neurology announce a special postgraduate course "EXPLORATIONS IN THE PHYSIOLOGY OF EMOTIONS"

Participants will be from the following medical schools: Arkansas, Baylor, California, Duke, Kansas, Nebraska, Oklahoma, Tulane.

AOA SPRING LECTURESHIP

MAY 1, 1957 4:00 P.M.

Medical School Auditorium

Speaker: Norman H. Horowitz, M.D., Professor of Biology at California Institute of Technology, Pasadena, California.

Subject: "Genes, Molecules, and Medicine." Everyone who is interested is invited.

ARMY MEDICAL SERVICES COURSE

May 6-8, 1957

Brooke Army Hospital, Brooke Army Medical Center, Ft. Sam Houston, Texas.

"SURGERY IN ACUTE TRAUMA"

**UNIVERSITY OF OKLAHOMA
SCHOOL OF MEDICINE**

POSTGRADUATE COURSES—1956-1957

SHORT COURSE SERIES

3:30 to 8:30 p.m., Room 118, Medical School Afternoon and Evening Sessions

May 15—Chronic Pulmonary Disease

June 1—Surgical Emergencies

SELECTED PROBLEMS IN INTERNAL MEDICINE
November 26-30—Arranged by the American College of Physicians

OKLAHOMA ASSOCIATION OF HOUSE STAFF
PHYSICIANS

May 31—Two Guest Lecturers and presentation of original papers by members of the various House Staffs will highlight this program.

**POSTGRADUATE COURSE
ON GASTROENTEROLOGY**

MAY 13-15, 1957

University of Colorado School of Medicine
Denver, Colorado

Sponsored by the American Gastroenterological Association

May 13—Dinner Meeting with speaker Doctor Herman Taylor of London, England, speaking on the subject: "The Present Status of Medicine in England."

May 1—Six outstanding guest speakers participate in a panel discussion "The Peptic Ulcer Problem."

Further information can be obtained by writing to: The Office of Postgraduate Medical Education, University of Colorado Medical Center, 4200 East Ninth Avenue, Denver 20, Colorado.

Post Graduate Symposium on the

**BASIC SCIENCES
RELATED TO ANESTHESIOLOGY**

JUNE 10-14, 1957

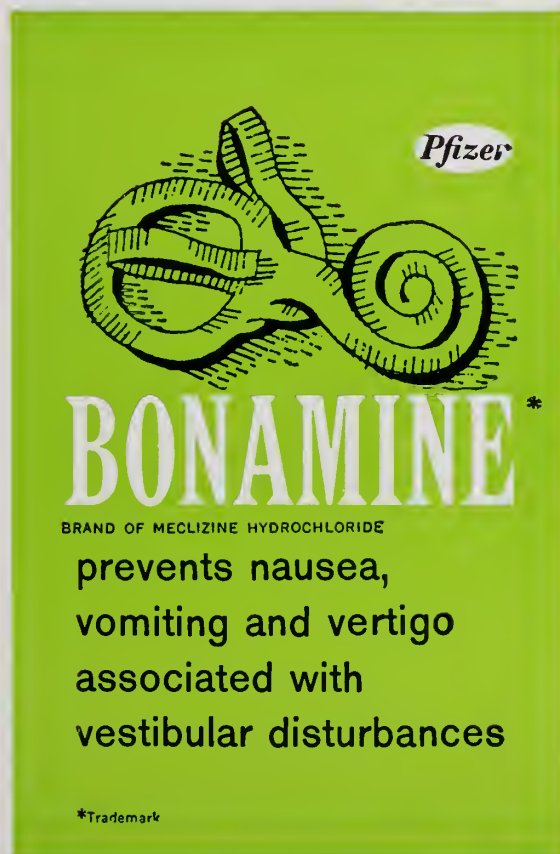
Hotel Webster Hall

Pittsburgh, Pennsylvania

University of Pittsburgh School of Medicine Department will present the symposium in co-operation with the Departments of Anesthesiology of the St. Francis, Allegheny General, Mercy, Medical Center Hospitals.

Registration Fee—\$25.00

The course will be limited to 50 participants. Full particulars should be obtained from Chairman of the Committee on Graduate Medical Education, University of Pittsburgh School of Medicine, 3941 O'Hara Street, Pittsburgh 13, Pennsylvania.



Pfizer

BONAMINE*

BRAND OF MECLIZINE HYDROCHLORIDE

**prevents nausea,
vomiting and vertigo
associated with
vestibular disturbances**

*Trademark

Association Activities

Association to Participate in Semi-Centennial Exposition

The Oklahoma State Medical Association will play a vital role when Oklahoma celebrates its fiftieth anniversary by inviting the nation to attend its Semi-Centennial Exposition. Between June 14 and July 7, over one million persons will pour through the Oklahoma City Fairgrounds to see outstanding exhibits in such fields as medicine, electronics, nuclear science and automation. Over twenty foreign nations plus nearly every major manufacturer in the United States will be represented in the greatest show to be held in the nation in 1957.

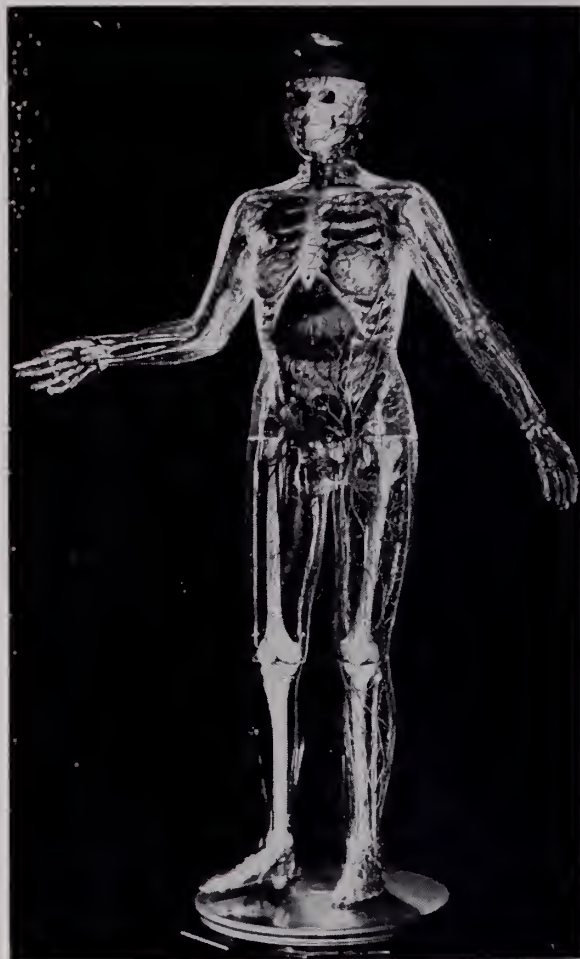
Council Approves

At a January meeting of the O.S.M.A.'s Council, the Councilors unanimously voted to participate in the Exposition by conducting the "Cavalcade of Health," a health education show directed to the public. Henry H. Turner, M.D., Oklahoma City, was designated as chairman of the committee to organize what will probably be the State Association's greatest single public service endeavor. Helping Doctor Turner are Vernon Cushing, M.D., Vice Chairman of the General Committee; Meredith Appleton, M.D., Chairman of the Executive Committee; John Cunningham, M.D., Chairman of the Exhibits Committee; S. Fulton Tompkins, M.D., Chairman of the Motion Picture Review Committee and William J. Dowling, M.D., Chairman of the Publicity Committee.

The Association has leased a building containing 20,000 square feet of floor space. It is planned to have approximately fifty health education booths plus a movie theatre where continuous health education films will be shown. There will be no admission charged.

Outstanding Exhibits Slated

Over forty excellent exhibits have already been committed to the Cavalcade of Health by voluntary health agencies, related medical organizations, official state agencies, pharmaceutical manufacturers, insurance associations, and other lay groups who are



JUNO

interested in promoting better health for Oklahomans. In addition, the American Medical Association will have eight of its best exhibits on display including, "Life Begins," which tells the story of human reproduction and is one of the most popular health exhibits in the world.

'Juno' Arrives

Perhaps one of the biggest attractions of the whole exposition will be "Juno," the Plastic Lady. This exhibit which is now in storage at the State Headquarters is a transparent plastic figure which clearly indicates the systems of the human female body. Principal internal organs of the figure illuminate in synchronization as the simulated voice of the figure explains the function of each. The electronically controlled exhibit

was constructed in Germany and was loaned to the Association by its owner, the Dominican Republic.

Exposition to Be Widely Publicized

Full page color ads in Life magazine and national radio, television, newspaper and outdoor advertising will herald Oklahoma's Fiftieth Anniversary and extend invitations to visit the Semi-Centennial Exposition. Dave Garroway will be in Oklahoma City to broadcast fifteen hours of national television from the Cavalcade of Health and other outstanding exhibits on the Fairgrounds.

Doctor Turner expressed hope that the members of the Oklahoma State Medical Association would use every opportunity to publicize the health education aspect of the Exposition. "The State Association has raised over \$18,000 to put on this show," he stated, "now it is up to the doctors to help us call this worthwhile endeavor to the attention of every person in the State." He explained that plans are being formulated to get national and statewide publicity and that publicity releases would be sent to all county medical societies in order to carry the message to the local level.

State Society of Internal Medicine Organized

An Oklahoma Society of Internal Medicine has been organized to "study the scientific, economic, social and political aspects of medicine in order to secure and maintain the highest standards of practice in Internal Medicine," according to President George N. Barry, M.D., Oklahoma City.

Sixty-two members, all qualified Internists restricting their practice to Internal Medicine, attended the charter meeting held on February 28, 1957. The members elected the following officers: George N. Barry, M.D., Oklahoma City, President; S. C. Shepard, M.D., Tulsa, President-Elect; and H. H. Macumber, M.D., Chickasha, Secretary-Treasurer.

The newly formed Society is affiliated with the American Society of Internal Medicine which has a state chapter in most of the 48 states.

OU Medical Center Awarded \$184,000 Grant

The OU Medical Center has been awarded a \$184,000 grant from the National Institute of Mental Health to expand its training program in medical statistics. It is the largest single grant of its kind to be awarded to the OU Medical Center. Funds will be spread over a 5-year period beginning April 1.

The expended program will train statisticians and, at the same time, will serve research men at the Medical Center. Services will include: designing research projects, providing guidance during the progress of experimentation, and analyzing and interpreting results. The grant will provide expansion in four areas: (1) additional personnel to teach and direct statistical projects, (2) additional facilities and equipment, (3) special opportunities for medically-trained students to devote fulltime toward specialization in statistics, and (4) scholarships for qualified students.

Carl R. Doering, M.D., professor of preventive medicine and public health at the OU School of Medicine and a recognized leader in the field of biostatistics, will direct the program. Kirk T. Mosley, M.D., chairman of the OU department of preventive medicine and public health, will also participate.

In planning the grant, advice and consultation was furnished by Dr. John C. Brixey, professor of mathematics at OU, and Dr. Lloyd Wayne Johnson, professor of mathematics at Oklahoma A & M College. An assistant professor of mathematics will need to be employed for the program.

The grant provides for two senior fellowships and a number of scholarships. The fellowships have been awarded to two physicians who have fulltime duties at the Medical Center: Eugene R. Flock, M.D., and James A. Hagans, M.D.

Doctor Flock, a graduate of the OU School of Medicine (1951), is currently assistant director of health service at University Hospitals. Doctor Hagans, a graduate of the University of Cincinnati Medical School (1946), is directing the therapeutic research unit at the V.A. Hospital.

A.M.A. Plans Outstanding Medical Meeting in June

Physicians attending the AMA's 106th Annual Meeting in New York City June 3-7 will find a star-studded revue of exhibits, scientific lectures, medical films and color television programs lined up for their pleasure and enlightenment. Approximately 18,000 physicians from all over the country are expected to participate in this world-famous "short course" in postgraduate medical education. Focal point of the scientific program will be the Coliseum—New York's new exhibition hall—with four floors devoted to technical and scientific exhibits, many of the scientific meetings and the color television program. A number of section meetings plus the scientific film program will be held in hotels near the exhibit hall. Headquarters for the House of Delegates will be the Waldorf Astoria.

An outstanding scientific lecture program is being arranged by the Council on Scientific Assembly. Kicking off the general scientific program on Monday morning, June 3, will be a review of recent progress in surgery while the afternoon session will deal with recent advances in medicine. Tuesday morning's general meeting will feature a discussion on the use and abuse of mood-altering drugs in daily practice.

Formal section meetings will run from Tuesday afternoon through Friday morning. Many of the sections will combine to present special symposiums and panel discussions. The Section on Miscellaneous Topics is arranging sessions on allergy, legal medicine with mock trial involving the testing of drinking drivers, and methods of improving communication in medicine. A number of exhibit-symposiums and question-and-answer conferences also will be held. Special exhibits on fractures, diabetes, perinatal mortality, pulmonary function testing, fresh tissue pathology, arthritis, and nutrition also will be presented.

The color television program presenting live surgical procedures from Roosevelt Hospital will again be sponsored in cooperation with Smith, Kline & French Laboratories.

A foreign air is being added to the regular medical film program for the first time. More than 20 foreign countries are sending

special films dealing with many aspects of medical science to the "international medical film program." Both the international and regular film programs will be held at the Barbizon Plaza Hotel.

Registration officially opens at the Coliseum Monday at 8:30 a.m. and closes Friday noon. Advance registrations will be accepted Sunday from 12 noon to 4:00 p.m. The exhibit will be open to "doctors only" on Tuesday and Wednesday mornings to give physicians an opportunity to circulate more freely among the technical and scientific exhibits. For your comfort, the new Coliseum has many facilities, including air conditioning, escalators, elevators, a cafeteria, and snack bars.

Officially representing the Oklahoma State Medical Association will be Delegates John F. Burton, M.D., and Wilkie D. Hoover, M.D. In addition, Alternate Delegates Malcolm E. Phelps, M.D., and E. H. Shuller, M.D., are expected to attend.

Physicians and their wives should plan now to attend this worthwhile medical conclave. Further details will be published in the *Journal of the AMA*.

State Physicians To Be On Southwest Surgical Congress

Several Oklahoma physicians will be actively participating on the program of the Ninth Annual Meeting of the Southwestern Surgical Congress to be held in Wichita, Kansas, April 15-16-17.

George M. Brown, M.D., McAlester, will give a twenty-minute report during Monday's scientific session on "A New Approach to Radical Left Colectomy: Preliminary Report."

"Current Concepts of Treatment of Peripheral Vascular Occlusive Disease" will be presented by Doctors Edward R. Munnell and Austin H. Bell of Oklahoma City during the Wednesday morning Scientific Session. On the program later the same day will be John A. Schilling, M.D., Oklahoma City. Doctor Schilling will conduct the first half of the Illustrated Hour on "Medical and Surgical Problems in the High Altitude Andean Native." During the afternoon session he will act as collaborator on a panel discussion of "Intestinal Obstruction."

NFME Awards OU Medical School \$39,180 During 1956

The University of Oklahoma School of Medicine received \$39,180 of grants totaling \$3,066,450 awarded by the National Foundation Fund for Medical education in 1956 to the nation's 82 medical schools.

The \$3,066,450 was the largest award in the Funds' history and brings to \$12,665,591 the total given out since 1951 when the first grants were made.

Industry Support at New High

Each of the 76 four-year schools this year received a lump sum of \$15,000 plus \$65 per undergraduate medical student. Four two-year medical basic science schools received \$7,500, plus \$65 per student and the remaining two schools—formerly two-year schools now in the process of becoming four-year schools—received \$11,250 plus the \$65 per student.

The grants were made possible by the record number of contributions to the Fund by business corporations and individuals, plus a generous "matching" grant by The Ford Foundation.

By arrangement with The Ford Foundation, all Fund receipts in 1956, up to the previous year's total, were matched 70 per cent. All receipts above that were matched dollar-for-dollar.

This matching arrangement, plus the normal tax deduction, enables contributors to provide benefits to the medical schools many times the actual cost to the contributor.

Both the number of Fund contributors, and amounts contributed, reached a new high in 1956. Altogether, 1,737 corporations contributed \$1,862,115 compared to 1,525 corporations and \$1,682,508 the previous year.

Fund grants are unrestricted but they are used chiefly by the schools to retain valuable personnel, fill faculty vacancies and to open new courses in areas of recent scientific advances.

Fund President S. Sloan Colt, commenting on the awards, paid tribute to "those far-seeing corporations that are helping to strengthen the nation's health structure." He said:

"This increase in corporation support of medical education comes at a most critical time. The gap between tuition and school costs is widening rapidly. For every dollar the schools as a whole receive in tuition, they spend an additional four dollars on operations and three dollars on research."

Mr. Colt, who is also chairman of the Bankers Trust Company, New York, said that the nation's 82 medical schools last fall admitted the largest freshman class in their history and are now teaching their largest student body. He continued:

Many Have Responsibilities

"Medical school responsibilities are increasing rapidly. Every advance in the biological sciences, in pharmacy, in public health in rehabilitation and the related disciplines adds to schools' activities and, consequently, to the financial burden.

"In other words, the very medical progress of which we are so proud—and for which the medical schools are largely responsible—has greatly aggravated their need for funds."

Today's medical school, Mr. Colt pointed out, is more than an educational institution. It is a medical science center, carrying on many activities in addition to training new doctors. He said:

"Each year the medical schools train 29,000 undergraduate medical students, graduating 7,000. They teach 11,500 interns, residents, specialists and other graduates seeking additional instruction, and 19,000 dental, pharmacy and nursing students.

Help Family Doctor

"They serve 72,000 family doctors and specialists through refresher courses, seminars and lectures, both at the school and in local hospitals.

"They provide more than two million men, women and children with free medical services; carry on research valued at nearly \$60 million; and furnish leadership and guidance for thousands of health agencies, organizations and foundations."

The financial pinch resulting from these activities, Mr. Colt pointed out, is medical education's "number one headache" at the present time and has serious implications for the future health of the nation.

Physicians Increase Role In Many Civic Activities

CHIGAGO—Thousands of American physicians today are disproving the misconception that medicine is “an ivory tower papered with greenbacks” by joining other groups in community service projects.

According to an editorial in the current (March 15) *Journal* of the American Medical Association, the doctors are joining in such “nonmedical” activities as safety campaigns, “get-out-the-vote” movements, and school building programs. More and more doctors are finding the time to serve on chambers of commerce, school boards, and better government committees.

All these activities actually are linked to better health for the doctor's community. But more than that, they offer a means of putting the doctor's practice “in the proper perspective of many doing together what cannot be done alone or separately,” the editorial said.

Examples of physicians' community activities were outlined in a special article in the same *Journal*.

A 1955 survey of county medical societies showed that doctors are active not only in blood banks, disease control programs, and graduate education programs, but also in organizing and judging poster and health contests, sponsoring Little League baseball teams and high school science fairs, and working for better civil defense, slum clearance, public education, fire prevention, human relations, and Scout activities.

Beginning in 1951, the Maricopa County Medical Society at Phoenix, Ariz., launched a campaign that put safety belts in thousands of Arizona cars, waged a war on accidental poisoning, and put out a tremendously successful booklet on home safety.

In Decatur, Ill., the last of six new schools soon will be open, partly because of the Mason County Medical Society's 11th-hour support of a construction bond issue. The doctors, their wives, and P.T.A. teams saved the day by distributing 5,000 leaflets financed by the medical society.

Decatur physicians later rallied support for a sewer bond issue and a dam to raise the level of Lake Decatur.

Endeavors by the Bronx (N.Y.) County

Medical Society have included smoke abatement safety programs, vote-and-registration drives, free vitamins for the needy aged, better fire and police protection, improved public transportation, and emergency ambulance service.

“Public service has become so synonymous with medical practice in the Bronx that the average citizen does not hesitate to bring civic problems to his family physician. The patient feels he will get not only a sympathetic ear, but effective action as well,” the article said.

“Behind this reasoning is a requirement of the Bronx County Medical Society that every member must belong to some civic, fraternal, veterans, service, or other community group. This assumes a feel of the public pulse and a field for concerted action on a wide variety of issues.”

As a means of increasing understanding among various groups in Omaha, Neb., and Evansville, Ind., joint picnics are held regularly by doctors, business executives, union stewards, ministers, and Kiwanis Club members. The Vanderburgh County Medical Society of Evansville also regularly meets with dentists and druggists in an effort to produce better interprofessional relations.

No single organization has worked more closely with physicians in community affairs than the local chambers of commerce, the article said. The Oakland, Calif., Chamber helped finance the first diabetes fair ever held in the West. The doctors of Parkersburg, W. Va., annually cooperate in the Chamber of Commerce's “Business-Education Day” for local high schools.

The New Orleans Chamber of Commerce has awarded the Orleans Parish Medical Society a Good Citizenship citation for promoting a “get-out-the-vote” campaign. Similar drives have been successfully conducted by the Michigan and South Dakota State Medical Associations.

The article quoted Dr. Louis H. Bauer, past-president of the A.M.A., who said, “The ready and constant willingness of the medical profession to take part in civic activities will be helpful to the community in solving health problems and will make the community ready to turn to the profession for advice rather than look to other, less qualified groups.”

Medical Education Week To Be Observed April 21-27

The impressive story of the accomplishment of the U.S. medical schools will be told to the nation during the second annual observance of Medical Education Week, April 21-27. Organizations comprising the Committee on Medical Education Week are: the AMA and the Woman's Auxiliary, the Association of American Medical Colleges, the Student AMA, the American Medical Education Foundation, and the National Fund for Medical Education.

The purpose of the observance is to focus the attention of the American people on the national importance and indispensability of medical education. A well-organized program of public information will bring about greater friendship and support for the medical schools by creating a better understanding of their aims, problems, achievements, and public services. County societies in the State are being sent special packets with material outlining suggested ways to promote this special event in their communities.

President Eisenhower, in his personal endorsement of this observance, said, "While the benefits of health and medical education are daily with us, it is fitting to devote a special week to the consideration of the wider training of physicians. Each American has a personal stake in our country's medical schools. The schools which train the physicians required by our growing population are a vital resource for the health of our people and the strength of the Nation."

The specific aims of Medical Education Week are:

1. To portray the key role that medical education plays in the promotion and maintenance of the nation's health and security, and make the public aware that the nation's 82 medical schools are the foundation of our entire health and medical structure.

2. To explain how the medical schools are striving to meet the demand for larger number of physicians, and at the same time, to maintain the high standards of training that has come to characterize American medical education.

3. To call attention to the steady progress in the medical sciences, showing what this means in terms of longer life, better health and greater freedom from disease and disability.

4. To point out the wide range of activities—teaching, research, service and leadership—Carried on by the modern medical school in addition to its job of training new doctors.

5. To make clear the extent and nature of the new challenges to the profession, some growing out of the constantly expanding fund of medical knowledge and some resulting from the mounting complexity of civilization.

6. To point out some of the steps being taken constantly to push back the horizons of the medical sciences and to realize the full potential of the nation's health resources.

While medical societies and medical schools throughout the country build community programs around these objectives, the national sponsors are enlisting the help of newspaper syndicates, radio and television networks, popular and professional publication, civic groups, industry, and commerce in a broad program of national publicity and promotion.

Intern-Resident Day Program May 31, 1957

The third Annual Intern Resident Day Program will be held Friday, May 31, 1957. Guest speakers will be Donald Seldin, M.D., Professor of Medicine and Chairman of the Department of the Southwestern Medical School; Charles A. Hunter, M.D., Assistant Professor of Obstetrics and Gynecology of the University of Kansas.

Original papers and case reports will be presented by the house staff members.

This program is approved for credit by the American Academy of General Practice. All physicians are invited to attend.

A.M.A. Tells Physicians Role in National Legislature

The Washington office of the American Medical Association has extracted from historical documents, data on all the physicians who have served in the national legislature. Thomas H. Alphin, M.D., Director of the Washington office, has sent to the *Journal* the following data on them.

Doctors Were in on the Ground Floor: Fived Signed Declaration

In 1776 Josiah Bartlett was 47 years of age, described by his biographer as "a tall man with a fine figure who wore his auburn hair in a queue." He was considerably more than that. He was a distinguished Massachusetts physician and an able and ardent patriot. He already had suffered for his interest in politics; he had been ousted from his post as justice of the peace by the Royal Governor of Massachusetts, and had seen his home burned to the ground.

By 1776 Dr. Bartlett clearly had made his choice. So it was natural that as a Massachusetts delegate to the Continental Congress he signed the Declaration of Independence. Perhaps it was only an accident, but he was the second person to sign the engrossed document at the formal ceremony on August 2 of that year.

Dr. Bartlett was not the only physician to sign the Declaration. There were four others: Drs. Lyman Hall, Benjamin Rush, Matthew Thornton and Oliver Wolcott. All except Dr. Wolcott were in active practice at the time; while trained in medicine, he had given it up for law.

With all the others who signed the document—the lawyers, the statesmen, the soldiers, the businessmen—these five doctors were to achieve a degree of immortality. They are also symbolic of the strong interest the medical profession has taken in national legislation over the years.

Doctors in Congress Through the Years: By States, By Parties

Dr. Bartlett had been one of four physician members of the Second Continental Congress in 1775. The next year the Colonies sent eight doctors to the deliberations. In the critical years of 1783-84, eleven doctors were in the young Congresses that

struggled to keep the states united. It is a tribute to the versatility of the profession that in the 181 years since 1775 doctors have sat in every Congress.

Research by this office carries down through nearly two centuries, Congress by Congress, the story of the medical profession's contribution to the development of the American legislature. Here are some statistics on the doctors' participation:

Total Representation. Six physicians now are members of the House of Representatives of the 85th Congress that convenes in January. Counting them, a total of 359 physicians have served in American Congresses since 1775, including 35 senators. Of the 359, eleven practiced another profession—generally law—as well as medicine, 33 were not active in practice when elected, and 18 had graduated in medicine but never practiced.

By Parties. A total of 165 physicians were Democrats. Other party representation: Republicans 67, Whigs 30, Federalists 17, Jacksonian Democrats 6, American party 5, National Republicans 2, Independents 2, and one each from six other minor parties. There is no record attached to the 27 who sat in the Continental Congress between 1775 and 1788.

By States. The large states that were members of the original 13 Colonies naturally have supplied the most doctors to Congress. Leading the list is Pennsylvania with 52. Next are New York with 48 and New Jersey, 30. Ohio, although coming into the Union later, has sent 26 doctors to Congress. Other totals: Georgia 17, Kentucky 12, Maryland 16, Massachusetts 13, Missouri 10, New Hampshire 14, Virginia 18, North Carolina 11. Connecticut has elected six to Congress, Delaware seven, Illinois five, Indiana seven, Louisiana five, Michigan five, South Carolina five, Tennessee eight. The following have elected from one to four physicians as Representatives or Senators: Alabama, Arkansas, California, North Dakota, Florida, Idaho, Iowa, Maine, Minnesota, Montana, Nebraska, New Mexico, Oregon, Rhode Island, Texas, Utah, Vermont, Washington, West Virginia, Wisconsin and Wyoming. Puerto Rico's present Resident Commissioner also is a physician, Dr. A. Fernos-Isern. He is a non-voting member of the House.

Sketches of a Few Famous American Physician-Legislators

During the troubled years from 1810 to 1849—the War of 1812, the struggle for expansion, the Mexican War, the early political skirmishes over slavery—there were at least eight and usually 12 to 18 doctors in Congress. In the following few sessions of Congress, the years leading up to the Civil War, the profession also was well represented, having from seven to 15 of its members in the House or Senate. During the Civil War, although a high percentage of the doctors were with the armies, between five and seven usually were seated in Washington.

These statistics may be important, but they show nothing at all about what these men were like as men, or what impelled them into the turmoil of national politics. In subsequent paragraphs some of them will be described in other connections—as state governors, as military line officers, as physician-legislators who also made unusual contributions. Below are brief sketches of a few not otherwise described in this report who were outstanding:

Matthew Thornton, a contemporary of Dr. Bartlett and the third signer of the Declaration of Independence, was a colonel in the New Hampshire troops almost 30 years before the Revolutionary War. Massive physically as well as mentally, he is said to have had “black penetrating eyes and an invincibly grave expression.” After one session of the Continental Congress, he was appointed to his state’s supreme court and thereafter did not practice medicine. One example of his mental capacity: when past 80 years of age he wrote a metaphysical treatise.

Lyman Hall, another signer of the Declaration, was born in Connecticut, graduated from Yale, then migrated to St. John’s Parish on the Georgia coast, where he gathered around him a colony of intellectuals and independents. When he arrived at the Continental Congress in 1775, John Adams described him as “intelligent and spirited . . . made a powerful addition to our phalanx.” Like Dr. Bartlett and most of the others, he suffered for his views. His home was burned by the British in 1778. Later, as governor of Georgia, he helped to found the Univer-

sity of Georgia. Throughout his career he practiced medicine while also prospering as a rice planter.

Benjamin Rush of Pennsylvania, another practicing physician who signed the Declaration, was easily the most famous American physician and medical teacher of his generation. Dr. Rush was a rugged character, brash and bold in debate and in conduct. His correspondence was so indiscrete—he feuded violently with Washington, among others—that his family kept his private papers secret until recent years. He was a confidant of all the important men of his age in political life. It was to him that Jefferson wrote this famous line: “I have sworn upon the altar of God eternal hostility against every form of tyranny over the mind of man.”

William Shippen of Pennsylvania, was a member of the Continental Congress and a dedicated physician all his life, one of the founders of the College of Philadelphia (later University of Pennsylvania) and of the College of New Jersey (later Princeton).

Samuel Holten of Massachusetts, a friend of the Revolution from the beginning, held many state posts, and was a member of Provincial Congress, of the Committee of Safety and at one time president pro tempore of Continental Congress; later a judge.

David Ramsey of South Carolina, where he moved from Philadelphia, was an Army surgeon during the Revolution. Captured at the fall of Charleston, he was imprisoned by British for 11 months. Later, a member of Continental Congress and at one time its President pro tempore, he instituted the first election contest ever filed before Congress.

John Condit of New Jersey, was twice appointed and twice elected to the U.S. Senate and several times elected to House. A founder and trustee of Orange Academy, he was an Army surgeon during the Revolution.

Samuel L. Mitchell of New York, served as Representative or Senator from 1800 to 1813. He was medical editor and professor of natural history and botany and materia medica in the New York College of Physicians and Surgeons.

Westel Willoughby, Jr., of New York, was state judge, member of state Assembly and

president of Western New York College of Physicians and Surgeons. He was an Army surgeon (1812) before election to U.S. House. He founded the town of Willoughby, Ohio, and Willoughby College (now part of Syracuse University).

Royal S. Copeland of New York, perhaps best known of the modern physician-senators, entered political life as mayor of Ann Arbor, Mich., 1901-1903, and on moving to New York City, served as public health commissioner for five years. He was elected to the Senate in 1922 and served until his death in 1938.

13 Physician-Congressmen Also Were Governors

Among the 359 doctors who have reached Congress, there are scores who, the records show, thrived on political combat. All their lives they were active in state and local politics and government, as well as national. They were sheriffs, judges, state legislators, state and national committeemen. Records we have studied are evidence that at least 13 of these men—doctors elected to Washington—also became state or territorial governors at one time or another.

One of the most colorful must have been Dr. James W. Throckmorton of Texas, who served in the House of Representatives after the Civil War. He was elected governor of Texas without much trouble, but was thrown out of office on orders of General Sheridan.

Three states—Alabama, Delaware and Ohio—had doctors as their first governors. William W. Bidd was Alabama's first governor, before coming to Congress, where he served both in Senate and House. Likewise, Edward Tiffin was elected first governor of Ohio in 1803, following which he came to Washington as a U.S. Senator. Joshua Clayton, who had one term in the U.S. Senate at the end of the eighteenth century, was Delaware's first governor.

At least two physicians who served in Congress also have been territorial governors. Late in his career, William A. Newell was territorial governor of Washington, a job that could not have been a novelty to him as he had served as New Jersey's chief executive between two terms in the U.S. Senate in the mid-nineteenth century. Dr. Newell rounded off his career with an appointment as U.S. Indian Inspector, starting

in 1884. During the Civil War William Jayne was Dakota Territory governor after sitting two years in the U.S. House as a non-voting delegate.

Other physician-governors who spent some time in the U.S. House or Senate: John Osborne, Wyoming governor 1893-95; William Harrison Bissel, Illinois, mid-nineteenth century; Alexander M. Dockery, Missouri's governor at end of nineteenth century; William Eustis, who served as U.S. Minister to the Netherlands and Governor of Massachusetts after two terms in the House of Representatives; Joseph Kent, Maryland's governor between terms in U.S. House and Senate; and Drs. Hall of Georgia and Wolcott of Connecticut, mentioned earlier as signers of the Declaration of Independence.

Scores of Physician-Congressmen Also Led Troops in Battle

When the country was young and bursting at its seams, doctors like others moved from one profession or business to another rather freely—medicine to law to agriculture then perhaps back to medicine. But among doctors in national politics, the most popular transition was from medicine to military duty as line officers, then back again to medicine. This tendency was pronounced during the Revolutionary War, continued through the War of 1812, and was not unusual in the Civil War, even though by that time there was a national awareness of the great value of military surgeons.

Henry M. Shaw of North Carolina, served two terms in the U.S. House of Representatives before the Civil War. But when the fighting started he showed up as a line colonel in the Confederate Army and was killed in action near New Bern, N.C.

Similar to his career was that of a contemporary, Graham Fitch of Indiana, who raised a regiment of volunteers for the North and led the men as colonel until wounds forced his retirement. A younger doctor in Virginia, Robert E. Withers, followed the same course; a major of infantry, then colonel, finally discharged "in consequence of numerous disabling wounds." After the war he served in the Senate, founded the Lynchburg, Va., News, was named consul at Hong Kong.

A generation earlier Solon Borland of Arkansas had done the same thing—practiced medicine until the fighting started in Mexican and Civil Wars, then led troops in battle. His Senate service came between the wars. Similarly John Bratton of South Carolina preferred fighting to doctoring; like Dr. Borland he had the rank of line brigadier general in the Confederate Army. He was a U.S. Senator after the reconstruction period.

In view of these cases, it is not unusual that two physicians who served in Congress also were selected as Secretary of War. One was Henry Dearborn of Massachusetts, line officer in the Revolutionary War, secretary of war for eight years under Washington, member of Congress, then senior major general in command of troops in the War of 1812. An earlier Secretary of War for Washington was James McHenry of Maryland, whose Revolutionary War record shows him as surgeon, secretary to Washington, member of Lafayette's staff. He had sat in the Continental Congress.

They Were Lawyers, Botanists, Astronomers, Diplomats, Preachers

In addition to sitting in the U.S. Congress, doctors had the enthusiasm and capacity for many other activities, some unusual. They are not easy to catalog. Following are a few words about more of them. Unless otherwise indicated, their Congressional service was in the House of Representatives and during the years shown in parentheses:

John Archer of Maryland (1801-09) received the first medical degree issued on the American continent . . . Several combined preaching or theology with medicine—John Bull of Missouri (1833-35), Oliver Cromwell Comstock of New York (1813-19), Luther Jewett of Vermont (1815-17), Hugh Williamson of North Carolina (1789-93), and Manasseh Cutler of Massachusetts (1801-05). Dr. Cutler also had the time to be a lawyer, botanist and astronomer . . . John S. Harrison of Ohio (1853-59) had as good a claim on the White House as a man could get without being elected to it: he was the son of one President and the father of another. The first President Harrison, incidentally, studied medicine but did not practice . . . Two doctors who served in the Congress were later directors of the U.S. mint,

Samuel Moore of Pennsylvania (1817-23) and Daniel Sturgeon of Pennsylvania (Senate 1840-51), and one was U.S. Treasurer, Thomas T. Tucker of South Carolina (1787-88) . . . Alexander Campbell (Senate 1809-13) was vice president of the first Ohio anti-slavery society . . . Thomas Dunn English of New Jersey (1891-95), trained as physician and lawyer, neglected both for writing . . . Samuel Fowler of New Jersey (1833-37) is recognized as the discoverer of two minerals, fowlerite and franklinite . . . John E. Hutton of Missouri (1885-89) practiced law and medicine at the same time . . . After serving in the House, George B. Loring of Massachusetts (1877-81) was made U.S. Commissioner of Agriculture, then minister to Portugal . . . William S. Haymond (1875-77) organized the Central Medical College of Indianapolis, after Civil War service . . . Norton S. Townsend of Ohio (1851-53) became prominent in scientific agriculture . . . William Darlington of Pennsylvania (1815-23) was internationally recognized as a botanist . . . Robert B. Vance of North Carolina served one term (1823-25), was defeated three consecutive times when he tried again, the last time with a degree of finality: his successful opponent killed him in a duel.

Physician Members of 85th Congress, Which Convened in January

Walter H. Judd of Minnesota, member of House since 1942. Served in field artillery in World War I, medical missionary in China 1925-31 and 1934-38; just prior to World War II staged virtually one-man campaign to arouse people of U.S. against Japanese military expansion. *Arthur L. Miller* of Nebraska, member of House since 1942. Army reserve surgeon in World War I, Mayor of Kimball, Neb., member Nebraska legislature, state health director. *Ivor D. Fenton* of Pennsylvania, member of the House since 1939. Army surgeon for 20 months in World War I, 11 months overseas. *Thomas F. Morgan* of Pennsylvania, member of House since 1944. Maintains practice at Fredericktown, Pa., *Will E. Neal* of West Virginia, member of House 1952-54, elected again for 1957-58. General practice at Huntington, W. Va., since 1906, with exception three years as mayor. Served in state legislature and in various health posts.

Deaths

L. J. GEORGE, M.D.

1882-1957

Lawrence Jefferson George, M.D., 74, died February 28 following an extended illness.

The pioneer doctor was born October 9, 1882, in Arkansas and graduated from the Memphis Hospital Medical College in 1907. Doctor George had been a practicing physician in Stuart since 1915.

He was a member of the Oklahoma State Medical Association and an elder in the Stuart Church of Christ. He was also a life member of the Masonic Lodge there.

WINNIE M. SANGER, M.D.

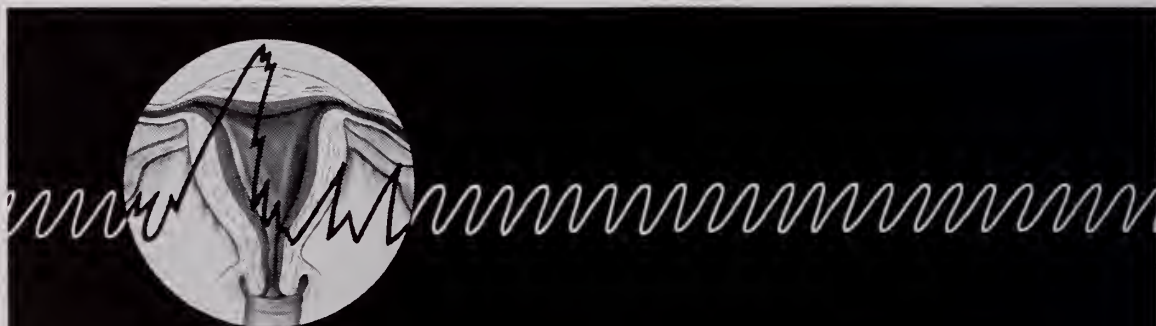
1877-1957

Winnie M. Sanger, M.D., Oklahoma City, died February 7.

Doctor Sanger was born February 2, 1877, and graduated from the University of Kansas in 1904. She took postgraduate training at Johns Hopkins, Baltimore, Maryland.

Doctor Sanger was a member of the Oklahoma County Medical Society and a life member since 1952 in the Oklahoma State Medical Association.

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Book Reviews

Ciba Foundation Symposium of Colloquia on Aging and Endocrinology. Edited by G. E. W. Wolstenholme, O.B.E., and Cecilia M. O'Connor. Little, Brown and Company, Boston.

I. *Aging in Transient Tissues.* Volume 2 of the Ciba Foundation Colloquia on Aging. Cloth. Pp. 263. 96 Illust.

In 1954 the Trustees of the Ciba Foundation embarked on a program to encourage basic research on the problems of aging. In 1954 the colloquium subject was General Aspects of Aging. At the suggestion of Prof. E. C. Amoroso, London, the 1955 sessions were devoted to studies on the aging of tissues, the normal life of which is shorter than that of the organism as a whole. This volume contains the papers and discussions of this second forum which was held in London. The subjects presented and discussed include a great variety of problems ranging from the physical instability and aging of red blood cells to the growth cycle of deer antlers.

The papers present much information that would be of interest to the micro-anatomist, the endocrinologist or the zoologist. There is little of "practical" interest to the average physician but a great deal of material that would stimulate the thinking of the theoretical physician.

II. *Internal Secretions of the Pancreas.* Volume 9 of the Ciba Foundation Colloquia on Endocrinology. Cloth. Pp. 292. 100 Illust.

Seventeen papers by world authorities on the subject are presented in this book.

Among the experts assembled to discuss the complexities of pancreatic secretions one recognizes such leaders as Best, Cavallero, De Duve, Von Holt and Foa among others. The informal discussions which follow each paper often are more provocative than the papers themselves.

This book can be heartily recommended to any scientist interested in the still unsolved mysteries of pancreatic secretion.

III. *Histamine.* Cloth. Pp. 472. 133 Illust.

Thirty-two of the world's outstanding authorities on histamine present experimental findings on various aspects of this potent amine. The informal conversational discussions are excellent extemporaneous papers

themselves. This book is a must for physiologists and pharmacologists.

Cancer. A Manual for Practitioners. 3rd Ed. Cloth. Pp. 321. American Cancer Society (Massachusetts Division) Inc. Boston, Mass. 1956.

The last edition of this splendid monograph on cancer appeared six years ago. The present edition summarizes the progress which has been made during that interval of time. Cytologic diagnosis of cancer was encompassed in two lines in the 1950 edition. These two lines have expanded to a whole chapter on cytologic diagnosis of cancer in the new volume. Radioisotopes are not even mentioned in the second edition. In this, the third edition, they too warrant a brief chapter of their own. Thus, throughout the entire book, much obsolete matter has been omitted but much more of the new has been added. This reviewer knows of no other book published that offers a more concise, and easily readable, outline of all the aspects of cancer. It's entitled to be studied by every physician, specialist and generalist alike.—*John Matt, M.D.*

Clinical Urology for General Practice. By Justin J. Cordonnier, M.D., F.A.C.S., Professor of Urology, Washington University School of Medicine, St. Louis, Missouri; Chief of the Department of Urology, Barnes, St. Louis Children's and Allied Hospitals; Chief of Urology, Washington University Clinics; Consultant in Urology, U. S. Veterans Hospital, St. Louis, Missouri. Leather. \$6.75. Pp. 246. The C. V. Mosby Co., 3207 Washington Blvd., St. Louis 3, Missouri. April, 1956.

Clinical Urology for General Practice by an eminent professor of urology, Doctor Cordonnier, is well titled. It actually covers general urology in enough detail to leave few, if any, questions unanswered and is concise enough to be read through in a reasonable length of time. It makes a good reference for current problems in urology once the doctor becomes familiar with its contents. The large section dealing with neoplasms of the genito-urinary tract seems more than adequate for general practice where the problems would be infrequently dealt with. The sections on diagnosis, infections, obstructive uropathy, calculi and injuries are particularly suited for the general practitioner.—*Donald Albers, M.D.*

Oklahoma State Medical Association

Oklahoma City, Oklahoma

INCOME AND EXPENSE STATEMENT

January 1, 1956—December 31, 1956

INCOME

Dues	\$64,545.88	
Interest on U. S. Bonds	743.62	
Annual Meetings—Schedule	9,595.50	
Journal—Schedule	23,748.04	
Miscellaneous	407.96	\$99,041.00

EXPENSE

Office Expense—Schedule	\$28,236.04	
Annual Meeting—Schedule	10,660.10	
Journal—Schedule	27,491.91	
Public Policy Committee—Schedule	1,469.24	
Public Health Committee—Schedule	285.50	
Legal Expense	1,100.00	
Travel—Out of State (Delegates—Officers—Committees)	7,189.37	\$86,432.16
NET PROFIT		\$12,608.84

BALANCE SHEET

December 31, 1956

ASSETS

CURRENT ASSETS

Liberty National Bank	\$ 5,639.81	
Ponca City Building and Loan	10,000.00	
Petty Cash	23.41	\$ 15,663.22

FIXED ASSETS

Land	\$ 6,303.50	
Building	\$99,564.20	
Less: Reserve for Depreciation	1,493.46	98,070.74
Sprinkler System	3,750.00	
Less: Reserve for Depreciation	187.50	3,562.50
Furniture and Equipment	18,301.99	
Less: Reserve for Depreciation	6,266.89	12,035.10
		119,971.84

INVESTMENTS

United States Treasury Bonds	\$ 2,000.00
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DEFERRED ASSETS

Employees Retirement Fund—Contra	8,966.88
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TOTAL ASSETS	\$146,601.94
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LIABILITIES AND NET WORTH

CURRENT LIABILITIES

Accrued Taxes		
Withholding Tax	\$ 263.00	
Social Security	158.00	
Federal and State Unemployment	60.22	481.22

Retirement Fund Employees Contribution	1,171.75
Reserve for Employees Retirement Fund—Contra	8,966.88

NET WORTH	135,982.09
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TOTAL LIABILITIES AND NET WORTH	\$146,601.94
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STATEMENT OF APPLICATION OF BUILDING FUND

January 1, 1956 to December 31, 1956

CASH ON HAND BEGINNING OF YEAR AND INCOME RECEIVED DURING YEAR

December 31, 1955—Cash in Bank	\$ 43,026.50	
1955 Items of Expense Paid in 1956	871.17	\$ 42,155.33
1956 Special Assessments Building Fund		47,444.70
1956 U. S. Treasury Bonds Cashed		10,000.00
1956 Profit	12,608.84	
Depreciation Sustained	3,188.41	
1956 Receipts Over Expenditures		15,797.25
		<u>\$115,397.28</u>

Disbursements:

1956 Expenditures		
New Building	103,279.20	
New Furniture and Fixtures	6,454.86	109,734.06
December 31, 1956—Balance Cash in Bank and On Hand		<u>\$ 5,663.22</u>

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25 Years Ago . .



Articles published in *The Journal* of the Oklahoma State Medical Association April 1932. Edited by John G. Matt, M.D.

Parenteral Use of Liver Extract In Pernicious Anemia

"William P. Murphy, Boston (*Journal A.M.A.*, March 26, 1932), treated thirty patients with pernicious anemia by means of liver extract administered parenterally. The extract may be administered easily and safely either with or without hospitalization of the patient and with the greatest assurance of success. Improvement in the blood is even more rapid and striking than that to be expected from the ingestion of much larger doses of liver or potent liver extract. Treatment was followed by an increase in the reticulocytes (young red blood cells) generally within a shorter period than occurs after treatment by mouth, and the numbers of the erythrocytes have increased promptly in practically all cases treated, even in those patients who were considered to be somewhat resistant to improvement to liver or extract given orally. There was a prompt and often very striking increase in the numbers of the white blood cells and blood platelets within a few hours of the beginning of treatment and a continuance of a normal or slightly elevated level during the course of treatment. Symptomatic improvement occurred after parenteral treatment, as is to be expected following the satisfactory oral use of liver or liver extract, although the improvement in general well being of the patient possibly occurred sooner after the onset of treatment than when oral treatment is used. Improvement in symptoms resulting from the spinal cord damage was striking in those patients whose treatment had been most satisfactorily carried out. The extract was administered to the series of patients without a reaction of importance. It may be advisable, as has been done in some of the patients with whom this report deals, to test all cases with one or more small preliminary injections in order to avoid the possibility of a severe reaction in the rare patient who may be hypersensitive to the liver. The most satisfactory use of parenteral treatment is the intramuscular injection of large or optimal amounts of the liver extract (extract prepared from 300 to 400 gm. or more of liver) during the beginning of the treatment of a patient in relapse. Subsequent and maintenance treatment may perhaps best be carried out by similar smaller injections at intervals varying from five to seven days, or even much less frequently in the uncomplicated cases. The exact interval must be determined by the condition of the blood and of the patient. Although the injections may be given daily, such

treatment will rarely be indicated, and it has been generally less well received by the patient than treatment at less frequent intervals. The rapid effect, together with the ease and safety of administration of the extract, especially intramuscularly, makes it an invaluable means of treating the critically ill patient and may well replace the use of either transfusion or stomach tube in the treatment of such a patient. The injection method of treatment should be a valuable substitute for the oral method in the patient who finds difficulty in the constant ingestion of a sufficient amount of liver material or whose gastrointestinal tract is upset thereby, with resultant gas, discomfort or diarrhea. In the latter group the injections may be used permanently or for periods of a few weeks, alternately with liver or extract by mouth. In fact, such an alternation of methods may be desirable during the maintenance treatment of many patients who now find little or no difficulty with the oral regimen. Finally, mention is made of the economy possible through the use of parenteral extract as compared with the expense of either liver or liver extract administered orally."

Editorial Notes—Personal and General

Alva announces that its \$50,000 Municipal Hospital will be completed about the middle of April.

New Patients Said To Be Most Likely To Sue

Oradell, N.J.—Most lawsuits against doctors are brought by patients whom the doctor sees only once, says an editorial in December *Medical Economics*.

"If dissatisfied with his initial treatment, such a patient broods . . . So take special pains to satisfy him and (if his condition requires it) to get him to come back," the editorial recommends.

"In case your treatment doesn't help as expected, it becomes double important to keep the patient as your patient," the editorial continues. "Otherwise you have no chance to correct or alleviate a possible poor result."

And "if such a patient switches to another doctor, your legal risks multiply. According to William F. Martin, legal counsel to the New York State medical society, the second doctor is all too likely to drop some remark as this: 'If you' only come to me two months sooner . . . ' This remark doesn't sound like much," the magazine observes. "But it's apparently enough to make many a patient bring suit against his former doctor."

Therefore, *Medical Economics* suggests, "Do all you legitimately can to keep from becoming the 'former doctor'."

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PHYSICIAN PLACEMENT

Anesthesio

Daniel B. Perry, Residence Quarters, Harlem Hospital, New York, N. Y., age 48, Meharry Medical College, 1948, interned at Harlem Hospital, New York and served residency in anesthesia there, veteran, available December, 1957.

General Practice

Louis Marshall Cuvillier, Jr., 1407 Woodside Parkway, Silver Spring, Maryland, age 44, married, George Washington University School of Medicine, 1938, interned at Garfield Memorial Hospital, Washington, D.C., one year residency in medicine and obstetrics at Norfolk General Hospital, Norfolk, Virginia. Veteran, available upon 90 day notice.

Orby L. Butcher, Jr., 3106 Alaska, Dallas, Texas, age 29, married, University of Oklahoma, 1955, now in surgical residency at VA Hospital in Dallas, Veteran. Available, July, 1957.

David L. Mossman, USAH, Orthopedic Department, Ft. Riley, Kansas, age 28, married, University of Vermont, 1954, available upon separation from service, December, 1957.

Robert R. Rupp, 1235 N. Lorraine, Wichita, Kansas, age 30, married, University of Oklahoma, 1956, internship at Wesley Hospital, Wichita, veteran, available, July 1, 1957.

Internal Medicine

James E. Morris, Jr., 1034 Second St., S.E., Moultrie, Georgia, age 26, married, University of Tennessee College of Medicine, 1953, one year internal medicine residency, now serving military obligation, available February, 1957.

Robert W. Datesman, 94 Oak Street, Westwood, Massachusetts, age 30, married, University of Pennsylvania, 1951, residency training at University of Minnesota Hospitals, and Boston Veteran Hospital, Veteran, available in July, 1957.

Joseph A. Ezzo, 3215 Nebraska, St. Louis 18, Missouri, age 32, married, St. Louis University, residency at St. Louis City Hospital and St. Louis University Hospitals, veteran, available, July 1, 1957.

Obstetrics-Gynecology

John P. Harrod, Jr., 932 E. 56th Street, Chicago 37, Illinois, age 33, married, University of Georgia, 1946, served residency at University Hospital, Augusta, Ga., Duval County Hospital, Jacksonville, Florida and at Chicago Lyons-In Hospital, Board certified, veteran, availability date unknown.

Bernard Martin Davis, Jr., 101 Turnbridge Rd., Baltimore 12, Maryland, age 31, married, Georgetown University, 1951, 3 years residency at University Hospital, Baltimore, veteran, available, July 1, 1957.

Pathology

Jess D. Green, Jr., 1765 South Victor, Tulsa, age 32, married, George Washington University, 1950, will finish four years pathology residency in January, 1957.

Pediatrics

Robert W. Mosely, 211 Adams Street, Galax, Virginia, age 32, married, Medical College of Virginia, 1948, residency at Walter Reed Army Hospital, Board eligible, interested in private practice or public health, veteran, available April, 1957.

Surgery

Duane A. Barnett, 1636 N.E. 46th Street, Oklahoma City, age 30, married, University of Oklahoma, 1952, interned at Wesley Hospital, Oklahoma City, now in residency at Veteran's Administration Hospital, veteran, will be board eligible and available for practice July 1, 1957.

Aristides Cardona, 106 Sinis Rd., Syracuse, New York, age 30, married, State University of New York, 1951, Board eligible, wants additional residency, veteran, available, June, 1957.

Vernon L. Guynn, 2026 S. Second Ave., Maywood, Ill., age 32, married, University of Illinois, 1947, passed Part I of General Surgery Board, military obligation served, available January 1, 1957.

Alvin S. Natanson, 49 Kiernan Drive, Rantoul, Illinois, age 36, married, Tufts Medical College, 1949, residency training at Boston City Hospital, Diplomate of the American Board of Surgery, available upon separation from service, July, 1957.

Urology

John C. Brazos, 406 South Washington, Watertown, Wisconsin, age 36, married, University of Illinois, 1949, interned at Anckee County Hospital, St. Paul, Minnesota, residency at Milwaukee County Hospital, Milwaukee, Wisconsin. Veteran, available upon completion of residency, July 31, 1957.

Paul Lucian Livingston, 18340 Lake Chabot Road, Castro Valley, California, age 35, married, New York Medical College, 1946, served residencies at Orange Memorial Hospital, New Jersey and at Veterans' Administration Hospital, Long Beach, California, now Assistant Chief Urologist at V.A. Hospital, Board Qualified, veteran, available upon sixty days notice.

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Editorials

Some Answers to Questions About Polio

As the season for an increasing incidence of polio approaches, more and more questions will be asked of the physician about the vaccine. The answers to many of these are presented here. These have been obtained from a number of sources but principally from the *American Journal of Public Health* and from the Committee on Communicable Disease of the American Academy of Pediatrics.

Q. *How long does immunity conferred by three doses of Salk vaccine last?*

A. The final answer is not known, but Salk has reported high titers of antibody almost three years after vaccination.

Q. *Should a booster dose be given if a year or more has elapsed since the third dose?*

A. The actual necessity for doing so has not been demonstrated but it would seem wise if there is an increasing incidence of the disease.

Q. *If two doses have been given, but seven months have not elapsed since the second dose should the third dose be given anyway before the months of highest incidence?*

A. Yes, if it has been five months since the second dose especially if there appears to be an unusually high incidence.

Q. *What is expected of each dose of vaccine as it is given in the series?*

A. The first is for a primary vaccination or "take." The second dose is given from four to six weeks later to insure this effect lest the first did not take. The time is too short for it to have much of a booster effect. The third dose is designed to be a true booster. If one understands this the answer to questions regarding irregularity in administrations should be clear. The booster action can be expected to occur even though considerable time past the specified seven months has elapsed. It has been shown that primary sensitization occurs with the first dose in four out of five children. The second dose is to provide a "take" for the one

out of five in whom no sensitization occurred.

Q. *Would the vaccine be as effective if given intradermally instead of intramuscularly or subcutaneously?*

A. No. The antibody response is proportional to the amount of antigen injected. The larger dose is, therefore, the more effective one.

Q. *"Should elective nose and throat operations be postponed until some recommended interval after the administration of vaccine?"*

A. "Under ordinary circumstances, elective nose and throat operations are not performed during periods of high poliomyelitis incidence. If such an operation has to be performed during an epidemic period, it would be advisable to give two doses of vaccine and then wait a month, if such delay would not endanger the patient's life. Effective vaccination with a properly prepared and tested poliomyelitis vaccine greatly reduces the risk of paralytic poliomyelitis and does not engender or increase the chance of poliomyelitis infection. There is no reason, therefore, why elective nose and throat operations should be postponed following vaccination except that time be allowed for the protective effect of the vaccine to come into play."—*Am. J. Pub. Health* 46:571 (May) 1956.

(The last sentence reflects an unjustified reliance on the vaccine if it is only 60% effective against the Type I virus. *Editor.*)

Q. *If a member of a family contracts clinical polio what should be done about the other members of the family in the household?*

A. The other members of the household may be presumed to be already infected and the vaccine would be of little use to them. People incidentally exposed and outside the household should be vaccinated and those in their families should be vaccinated or if they have been vaccinated they should be given a booster if as much as a year has elapsed since their last booster.

Today's Health

It would seem that the members of our society are just as resistant to the magazine *Today's Health* as they used to be toward *Hygeia*. In that day it was said this opposition was directed more against the editor, M. F., than any other factor, but he is long gone, the name, format and contents have been changed, and still there is a profound lack of interest in this fine propaganda medium.

It is agreed that we physicians have not been able to get our message across to the general public and their representatives in the federal and state legislatures. Well, maybe all do not agree with this statement, but the results would indicate that it is 99 44/100 per cent true. No longer can our officers and agents walk into a legislative committee and get the laws and actions that we request. Some yes, but many no.

The individual physician is still well liked and respected by his patients, but physicians as a group are not liked by the man in the street, the voter. This has been confirmed by local and national polls too many times to be denied. And we are doing so little about it.

There are many reasons for this and complacency and lethargy are not the most important ones. Time is a factor, and strange as it may seem, there is a lack of knowledge as to the basic issues. Some physicians believe their job is just to practice medicine and take care of the sick. Some of these have gone so far as to state that they do not care too much about the economic and political atmosphere under which they have to work as long as they can work. The latter may have no interest in any kind of propaganda medium, but most of the rest would if they thought there was something that would be effective.

Why is it that *Today's Health* has never been given the consideration it deserves as this agent? It is written for the laymen. It not only explains diseases and treatment in easily understood terms, but there is always something in every issue about the free and independent practice of medicine and its advantages to the general public and the health of the nation.

Some physicians have not wanted the magazine in their reception rooms because sometimes the opinions of the author disagree with his opinions and this leads to some patient-physician conflicts. Could be this is a valid consideration.

But let's think in terms of general public education. Where may we do the most good? One thinks at once of the youngsters of the nation, the future voters. How many have ever thought in terms of our schools? Teachers are very anxious to get the magazine because it is so valuable in teaching hygiene, public health and preventive medicine.

It would cost so little for each physician to buy one subscription for a school library, public, parochial, grade or high. Maybe two or three for the latter. If this were done, we would be getting our official health message across to all the kids who are going to grow up and have their own ideas, concepts and prejudices the rest of their lives. They are going to hear lots of adverse propaganda, be exposed to lots of reading matter that blasts us and engage in lots of talk about health and doctors.

If they know the answers, they could be a big help. If they don't, they're apt to believe all kinds of wild rumors and untruths.

How about it? Why not spend a couple of bucks to win some future friends?

—G. Wilse Robinson, Jr., M.D.
*Editor of the Jackson County,
Missouri, Medical Society
Weekly Bulletin*

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Scientific Articles

Individual Management of

Peripheral VASCULAR OCCLUSIVE Disease

EDWARD R. MUNNELL, M.D.

Since many more persons are living into the older age decades, the problem of occlusive arterial disease has acquired new importance. Today, surgical publications focus the accelerated, significant progress of the vascular field. Therefore, it seems that a re-established interest in the early diagnosis and an awareness of newer treatment methods is timely.

Clinical Evaluation

History: As in any disease, the history is of great importance and in these problems the history of pain is foremost. Often the patient will not see a surgeon initially, but an internist or general practitioner, as the pain does not suggest blood vessel disease to him. Intermittent claudication is the "sine qua non" of arterial insufficiency. Subjective coldness or hyperesthesia to temperature is more commonly seen in arteriospasm than in true organic occlusive conditions.

Physical examination: Simply looking at the patient suggests involvement of the arterial system with degenerative disease. In an involved extremity the skin is pale, thinned-out, atrophic and has abnormal blanching with elevation and a marked reactive hyperemia with dependency. Often there is inequality of skin temperatures and this can be measured with a thermacouple if desired. Peripheral pulse changes—absence of a pulse or a difference in magnitude of comparable pulses, are the foremost findings.

Adjuncts; Xray, Oscillometry: In addition to the history and physical examination, other studies are done to gain more information concerning the nature of the peripheral arterial occlusion. Roentgenograms of the involved limb may show soft tissue

THE AUTHOR

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Doctor Munnell was previously at Oteen, North Carolina, where he was Chief, Cardiovascular Surgery at the Veterans Administration Hospital.

shadows of aneurysms, or the calcified vessels of generalized arteriosclerosis. Measuring the pulsatile volume changes in a leg using an oscillometer confirms the findings of the palpating finger and is used to follow the course of the patient. More important adjuncts, however, are arteriography and sympathetic block.

Arteriography: This study is consistently used in the workup of these degenerative vascular diseases. Intra-arterial iodine preparations outline vessels on roentgenograms and show blockage, narrowing or irregularity, and the location of collaterals. A method for arteriography has been evolved which has proven satisfactory.^{4,7} Necessary equipment and material are: (Fig. 1) dilute diodrast to test for iodine sensitivity, injection syringes, saline to test for satisfactory needle position, injection tubing, 18 gauge short bevel needles for femoral artery puncture, and 16 gauge 15 centimeter needles for aortic puncture. With the anesthetized patient in the prone position, translumbar aortography (Fig. 2) is done by inserting the needle lateral to the second lumbar vertebra below the left 12th rib and directing the

needle medial and cephalad. Needle position is carefully checked by saline injection and a test film using a small amount of diodrast. X-ray films are taken as the contrast material (70% diodrast) is injected.

Essentially the same technic is used for percutaneous femoral arteriogram (Fig. 3). The patient is supine and the common femoral artery is straddled with the fingers and needle puncture accomplished. Less concentrated diodrast (35%) is used for this study. This diagnostic tool is helpful in localizing segmentally occluded vessels and may also be used to show the results of adequate vessel grafting. Since arteriography carries a distinct risk, the indications for use must be carefully weighed.¹⁰

Sympathetic block: The final adjunct of an adequate clinical evaluation of these patients is sympathetic block. This is done when there is suspicion of diffuse arteriosclerosis. The necessary materials for this test are: novocaine (1%) xylocaine (1%), injection syringes and 6 centimeter needles of small bore. After the skin and muscles are anesthetized with novocaine, paraverte-

bral needles are positioned lateral to the interspinous space and lumbar sympathetic ganglia one to four are blocked with xylocaine (Fig. 4). Skin temperature change and the patient's subjective response to the block are recorded. The results of all of these studies help in placing the occlusive problem into a surgical category.

Surgical Categories

Occlusive arterial disease can be classed as (1) dead tissue, (2) segmental occlusion with diffuse arteriosclerosis and (3) so-called "pure" segmental occlusion. Long standing arterial insufficiency ultimately causes tissue necrosis and the surgeon is asked to treat this problem. The second group, diffuse arteriosclerosis with segmental occlusion, is seen on arteriograms and one must know the response to sympathetic block in their management. The third category, "pure" segmental occlusion, is actually a quantitative variation of diffuse arteriosclerosis, but there is significantly satisfactory proximal and distal vessels to the occluded area. Arteriogram study is mandatory in this group. Once a patient has been



Figure 1. Equipment for arteriography. This is used for both aortagraphy and femoral arteriography. Note small ampule of dilute contrast material which is used to test for possible sensitivity.

placed in a so-called surgical category, a method of treatment can be evolved.

Surgical Procedures

Incision, drainage and amputation: Infected areas are opened and drained, and dead tissue is removed by debridement and amputation by the time honored methods. Fortunately, this treatment is not necessary as often now as in the past, since earlier diagnosis and treatment makes possible the salvaging of many limbs which would have gone on to necrosis because of inadequate blood supply.

Sympathectomy: When one is confronted by a patient with diffuse arteriosclerosis and complete or partial segmental blockage, the patient should be offered lumbar sympathectomy rather than vessel replacement.^{2, 6} A white male, age 61, with left calf claudication and rest pain illustrates this type of case. He had good bilateral femoral pulses, but the popliteal, posterior tibial, and dorsalis pedis pulses were not found on the left. Generalized arteriosclerosis was diagnosed by arteriography (Fig. 5), and he had a satisfactory response to sympathetic block. Left lumbar sympathectomy (L 1-4) was

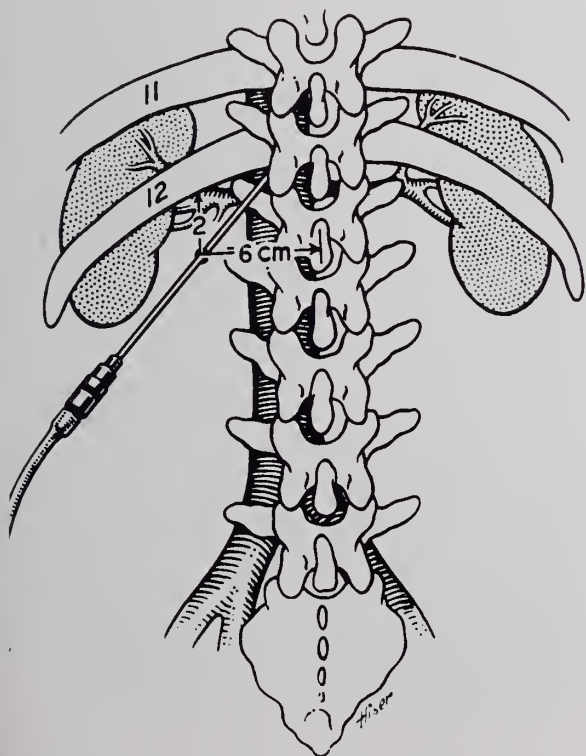


Figure 2. Translumbar aortography. Diagram illustrates site of artery puncture. See text.

done. He has returned to a gainful occupation without symptoms.

Direct approach on occluded vessel: During recent years the surgeon has been able to restore blood flow using vascular grafts.

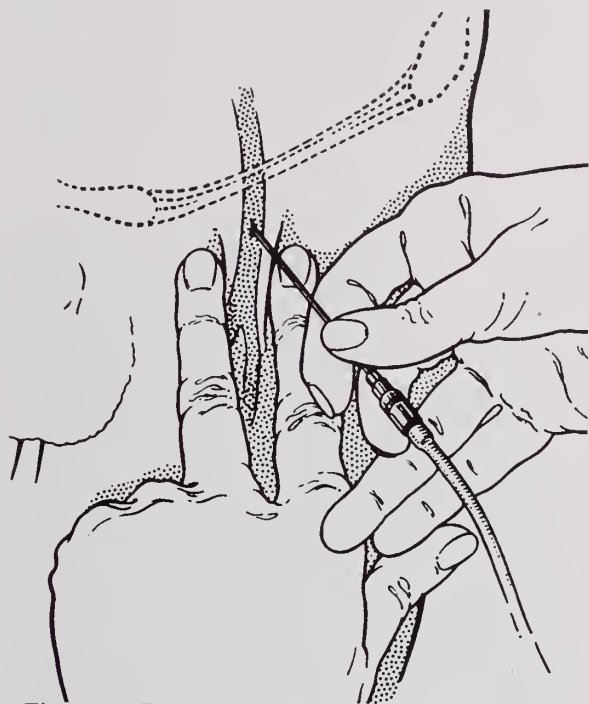


Figure 3. Percutaneous femoral arteriography. Diagram shows method of artery puncture. See text.

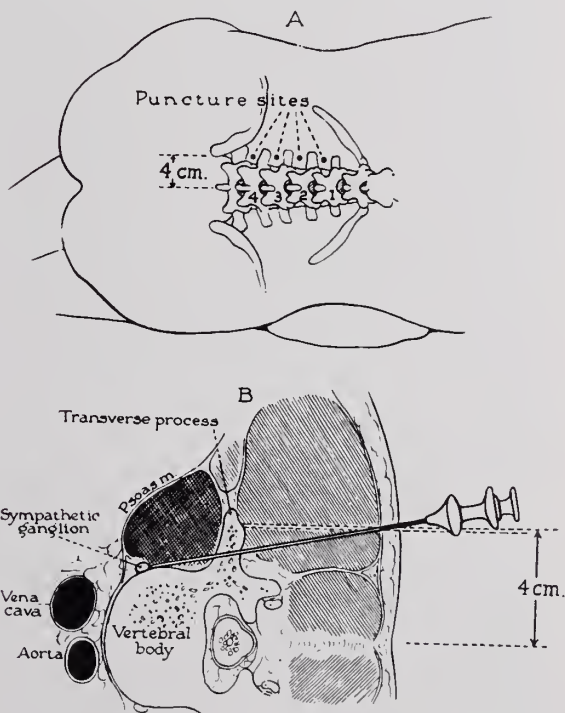


Figure 4. Diagram of lumbar sympathectomy. Note interspinous position of cutaneous wheals avoids striking of transverse processes by the blocking needle. See text for details. (Modified from: Military Surgical Manuals. Volume 5 W. B. Saunders, 1943)

Vascular grafts are basically of two types: (A) a prosthesis of synthetic cloth,^{1, 5} and (B) an artery homograft.^{3, 8, 9} The following cases illustrate methods of directly dealing with segmentally occluded arteries:

a) *Synthetic prosthesis*: A 60 year white male presented himself for examination with the complaint of intermittent claudication in the left leg of over six months duration which aggravated an old hip injury. The femoral pulse was "normal," but all other pulses on the left were absent. Arteriogram



Figure 5. Arteriogram shows generalized arteriosclerosis with narrowing and irregularity of vessel lumen. No segmental blockage. This case is suited for sympathectomy.

demonstrated superficial femoral artery occlusion (segmental) with adequate proximal and distal segments (Fig. 6). This patient's problem was managed by exclusion and bypassing of the blocked segment using a crimped nylon tube⁵ with end-to-end proximal and end-to-side distal anastomosis. He was discharged from the hospital without symptoms and with adequate peripheral pulses.

b) *Arterial homograft*: A 59 year man was seen because of a six months history of intermittent claudication with pain particularly in the foot and ankle. There was absence of pulses below the femoral on the right and femoral arteriogram showed a segmental occlusion of the popliteal artery (Fig. 7a). At exploration, athromatous blockage was found, resected and end-to-end anastomosis using a homograft done.³ A proximal thrombectomy was also necessary. After operation normal pulses were felt and an arteriogram (Fig 7b) showed adequate restoration of vascular continuity.



Figure 6. Femoral arteriogram showing segmental occlusion of the superficial femoral artery and satisfactory proximal and distal segments. Marks indicate length of blocked vessel. Ideal case for vessel graft.

Comment

The rapid progress in vascular surgery and increased incidence of peripheral vascular occlusive disease has brought about earlier diagnosis and new methods of management. Fewer cases with "dead tissue" are seen, but there will always be a sizable group—those with diffuse sclerosis—that derive the most benefit from sympathectomy. Vascular replacements in these patients result in failure and disappointment for all.^{3, 6, 9} However, in cases with segmental occlusion, vessel grafting has added another advance in treatment. Much has been reported concerning types of grafts. At this time arterial homografts and some synthetic cloth prostheses (nylon) seem equally good. Moreover, much has been reported about surgical technic—by-passing or excision of the disease segment, end-to-end or end-to-side anastomoses, the use of anticoagulants, and many others—and the bearing these factors have on the success of the method.^{3, 8, 9} Certainly all agree that, basically, the success of a graft depends on 1) a volume of blood under adequate pressure and 2) a satisfactory peripheral bed.

Conclusions

As the number of aged in the population increases, peripheral vascular occlusive disease will increase. A renewed emphasis on early diagnosis and precise cataloging of the disease process is necessary. Newer treatment methods, namely vascular grafts, have been added to the surgical armamentarium. Cases have illustrated the benefit of individualized treatment.

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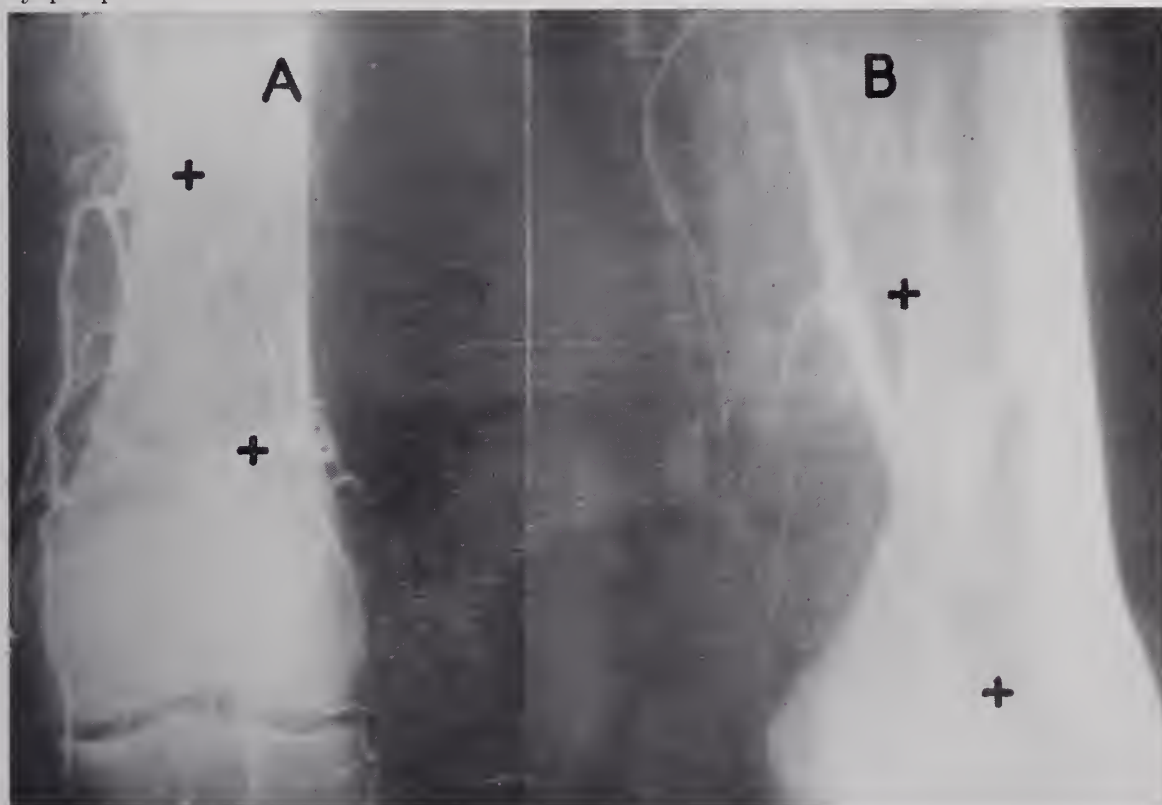


Figure 7. Femoral arteriogram. A-Preoperative. Segmental occlusion of popliteal artery. Marks show occluded artery. B-Postoperative. Adequate restoration of vascular continuity using arterial homograft. Marks show position of graft.

TUMORS OF THE NECK

As They Relate to Congenital Defects and Epithelial Glandular Structures

CLAUDE J. HUNT, M.D., F.A.C.S.
Kansas City, Missouri

Read before the Oklahoma Chapter, American Academy of General Practice, Oklahoma City, Oklahoma, Biltmore Hotel, February 4, 1957.

I wish, first, to discuss some of the structures that develop in the neck as the embryo progresses to its full maturity. These processes proceed to grow progressively from the various arches and clefts externally, and from the pharyngeal pouches within.

Five pairs of pharyngeal pouches in the lateral wall of the pharynx along with corresponding indentations of the ectoderm over each of these pouches, form the branchial clefts. These lie between parallel bars which are called arches. They become the upper part of the neck. They develop from the dorsal side of the neck and grow forward to meet in the midline. The upper arches grow more rapidly and consequently overlap the lower ones to form the cervical sinus. The outer grooves and the pharyngeal pouches come in contact with each other and form the closing membranes. Normally there is no communication between the clefts and the pouches. The thin closing membrane is uniformly developed without weakness or rupture.

The first arch develops the upper and lower jaw, the upper and lower lip, the malleus and incus of the middle ear and the body of the tongue. The second arch develops the lesser cornu of the hyoid bone, the styloid process and the stylo-hyoid ligament, anterior portion of the base of the tongue, a portion of the stapes and the palatoglossus arcus. The third arch develops the body and the great cornu of the hyoid bone, posterior portion of the tongue and the palatopharyngeus arcus. The fourth, fifth and sixth arches develop the thyroid cartilage, the cricoid cartilage and soft parts around the hyoid bone.

THE AUTHOR

Claude J. Hunt, M.D., F.A.C.S., was graduated from the Kansas University Medical School in 1915. He has since done postgraduate work at the University of Vienna, University Montpellier France, Harvard University and Washington University. Doctor Hunt's home is in Kansas City, Missouri where his practice is limited to his specialty, General Surgery.

Doctor Hunt is certified by the American Board of Surgery and is an honorary member of the St. Paul Surgical Society, Philadelphia Proctological Society, Rocky Mountain Radiological Society and Atlantic Coast Line Surgical Society. He has published over one hundred articles.

Doctor Hunt is the Past President of the Jackson County Medical Society, American Goiter Association and the Kansas City Surgical Society. He also is Past Chairman of the Surgical Section to the Southern Medical Association.

Doctor Hunt also holds membership in the Kansas City Southwest Clinical Society, Kansas City Academy of Medicine, Western Surgical Association, Central Surgical Association, International Surgical Society, International College of Surgeons, Pan-Pacific Surgical Association, American College of Surgeons, Southwestern Surgical Congress and the New York Academy of Science.

The first cleft develops the external ear and the external auditory meatus. The remaining clefts fuse with the arches and disappear.

The pharyngeal pouches develop additional structures. The first forms the eustachian tube and the tympanic cavity. The second the tonsillar and supratonsillar sinus. The third, the infra parathyroids and the stalks of the thymus gland and the fourth, the supra parathyroids and component parts to the thyroid gland. The tympanic membrane results from the first branchial cleft and the first pharyngeal pouch.

Branchial Fistulas

Branchial fistulas occur early in life and present a dimple or small opening on the side of the neck, near the lower part of the sternomastoid muscle. The diagnosis is self-evident, and little doubt should exist when a dimple or opening in this locality is observed, especially if it occasionally secretes a watery mucous substance. Early operation should be done, and usually it is best accomplished by a stepladder type of approach. An elliptic incision is made around the sinus opening, and the tract is dissected free, care being taken to protect the important structures (artery, vein, vagus and hypoglossal nerves), to the point of origin beneath the digastric muscle on the lateral aspect of the pharynx. (Sedgwick).

Sclerosing agents have been recommended by Cutler and Zollinger,¹ in the treatment of branchial fistulas. It has been proven by many to be unsatisfactory as reported by Ward, Hendrick and associates. Necrosis resulting from inflammatory reaction may occur with resulting perforation of the pharynx or associated structures. There is no substitute for complete excision. This has been proven in hernia. No sclerosing agent can replace excision of a hernia sac. The procedure of choice is the Hamilton and Bailey², "step ladder method." Dye injection of the tract by methelene blue is unwise because it may permeate the surrounding field if a rupture or a point of lateral weakness is present. A contrast lipiodol media delineates the tract and if a purse string suture is made at once after the dye is injected it dilates the tract, makes it more easily palpable and is helpful during the operation.

Branchial Cysts

These cysts occur usually at the anterior border of the sternomastoid muscle and are more often in the upper third of the neck in contrast to branchial fistulas, which are more likely to be in the lower third of the neck (Sedgwick).³ A painless mass appears in the neck and slowly progresses.

Branchial cysts are lateral cervical cysts, in contrast to thyroglossal cysts and dermoid cysts, which are usually in the midline. The lesions are discrete and not hard and should

not be mistaken for metastatic glands, thyroid adenomas, tumors of the carotid body or lymphomas.

The cysts should be excised, and the preferable approach is an adequate incision anterior to the sternomastoid muscle. The carotid sheath, with the artery, nerve and vein, is to be protected, since the pathway is between the internal and external carotid arteries. The hypoglossal nerve is in proximity and must be recognized and protected. The tract emerges from the pharynx near the fossa of Rosenmuller and lies underneath and behind the posterior gastric muscle. The tract, like that of a thyroglossal sinus or cyst, must be completely removed. If this is done, there will be no recurrence.

Branchial cysts may occur at any age and are usually at the angle of the jaw. The onset is insidious, painless and inconspicuous. There is a progressive swelling on the side of the neck, usually anterior to the sternomastoid muscle. Many occur after tonsillectomy because of the presence of an unknown incomplete branchial fistulous tract being present. It follows the plane of the sternomastoid muscle and in time descends from the angle of the neck and becomes elongated. Aspiration may introduce infection and suppuration with subsequent fistula formation. It likewise produces fixation, induration, scar tissue and makes subsequent surgery more difficult. Two groups of branchial cysts are possible. Those medial to the sternomastoid muscle and those between the superficial and deep layers of the cervical fascia.

Embryology Aspects of the Thyroid

Between the second and third pharyngeal pouches, at about the fourth week of fetal life, there appears a small growth on the ventral wall of the pharynx—of the foramen caecum. This growth progressively descends into the neck and is ultimately destined to become the thyroid gland. It descends as a hollow stalk, lined with epithelium, known as the thyroglossal duct. This epithelial-lined stalk normally undergoes obliteration. Failure to do so may result in a cyst or fistula. It is usually in the midline, just below the hyoid bone.

The tract is in direct relation to the hyoid bone, often adherent. It may be above the

bone or may even pass through it. Because of this relation to the hyoid bone it is necessary, in all cases of thyroglossal cysts and sinuses, to remove the midsection of this bone and dissect the tract up to its point of origin at the base of the tongue. This dissection can be facilitated by placing the index finger in the patient's mouth and pressing down upon the base of the tongue. This more accurately exposes and visualizes the tract above the hyoid bone.

If the cyst has ruptured, infection and fibrosis will be present and the epithelial tract will be replaced by fibrous tissue, with resulting surrounding adhesions.

Incision and drainage of a thyroglossal cyst is justified only when infection and inflammation are present.

Surgical Technic

A transverse incision is made in the region of the hyoid bone over the cyst, or an elliptic one if a sinus is present. The muscular attachments to the hyoid bone are freed and a central portion of the bone removed, care being taken to separate it from the thyrohyoid membrane beneath. The tract is then dissected up to the foramen caecum. This dissection will and should include some of the fibers of the adjacent muscles, the mylohyoid, the geniohyoid and the genioglossus. As has been mentioned, this can be facilitated by downward pressure of the index finger upon the back of the tongue. The hyoid bone can be approximated by suture of the surrounding muscles and fascia. A small drain should be placed up to the depth of the excision.

The essentials of the surgical treatment of lesions of the thyroglossal tract must always involve excision of the midsegment of the hyoid bone and the tract above the foramen caecum, as emphasized by Marshall,⁴ cure will not result unless this tract is excised, and it cannot be excised without sacrificing the midsection of the hyoid bone.

The Pyramidal Lobe of the Thyroid

This is a tongue like projection of thyroid tissue that usually extends upward along the left lateral aspect of the thyroid cartilage. It is a projecting remnant of an incompletely descended thyroid. It is often overlooked in thyroidectomy, and subse-

quently it may become hypertrophied and produce an undesirable tumor formation on the side of the neck. In our experience this tongue like projection has been observed to some degree in about two-thirds of our thyroidectomies. We always look for it. It may well be a factor in persistent hyperthyroidism after thyroidectomy.

Lateral Aberrant Thyroid

Discussion of the lateral aberrant thyroid continues to be controversial from the point of view of existence and relation to malignancy. A failure of the lateral components of thyroid tissue to fuse with the medial component and form the complete gland may result in aberrant thyroid tissue. Pember-ton⁵ expressed the opinion that this tissue is not misplaced thyroid tissue but malignant cells from the thyroid gland. Lahey,⁶ between 1941 and 1946, expressed the opinion that there did occasionally exist aberrant thyroid tissue that was separate and independent from the thyroid gland and that they were often malignant. It is embryologically possible and we have had two cases, neither of which were malignant.

Solitary Adenoma

The solitary or discrete adenoma of the thyroid is not always a single lesion. Jackson⁷ stated that clinically it appears as a single discrete tumor in the neck, but at operation there frequently are small adenomas associated with the clinically palpable one. These are true tumors of the thyroid, but the frequency of malignancy is controversial. Malignancy in these nontoxic nodular tumors, however, has been reported by Cole⁸ and Crile⁹ to be as high as 17 to 24 per cent; by Lahey,¹⁰ ten per cent, and by Ward,¹¹ 16.6 per cent. In children the frequency is even greater. Kennedy¹² reported 12 cases of cancer of the thyroid in 62 children aged 14 or less, and Ward encountered 40 per cent in a group of 10 children under 15 years of age. We received pathologic reports of 11 cases of carcinoma among 100 thyroidectomies performed for nodular goiter. Eight of the patients were between the ages of 17 and 27, and the oldest was 71. We have had one at the age of seven.

Hinton and Lord¹³ demonstrated that solitary adenomas of the thyroid, that appear

benign clinically, have a higher incidence of malignancy than do tumors in the breast that appear benign clinically. They reported an incidence of 7.6 per cent of cancer in 194 patients who had clinically benign nodular goiter, as contrasted to an incidence of 6.7 per cent of cancer in 75 patients who had clinically benign mammary lesions. They conclude that all nodular goiters should be removed, because of the high incidence of unsuspected cancer. I concur in this opinion, regardless of whether the tumor is small or large.

Multiple Nodular Goiter (Adenomatous)

Multiple nodular goiter is a degenerative process, with areas of involution and attempted regeneration. In my experience the incidence of cancer has not exceeded two per cent. Beahrs, Pemberton and Black¹⁴ reported an incidence of 7.5 per cent in 3,247 operative specimens of adenomatous goiter and an incidence of 4.8 per cent of carcinoma in nodular goiter. In my opinion, carcinoma, when present, is related to a congenital or hidden solitary adenoma.

Fully one-half of all multiple nodular goiters will eventually show clinical evidence of hyperthyroidism. Protracted observations demonstrate that eventually cardiac manifestations of irregularity, fibrillation and decompensation will often appear, especially in persons with a limited cardiac capacity. This relation of chronic hyperthyroidism to cardiac irregularity and decompensation has been emphasized by Hertzler,¹⁵ Lahey,¹⁶ Davison,¹⁷ Ginsberg,¹⁸ and others. It has been a common observation with us. It is our opinion that the degenerative nodular adenomatous goiter is the true cardiotoxic goiter. Davison stated that all goiters tend to be fatal, causing death by carcinoma, by thyrotoxicosis or by heart failure.

Cosmetic and mechanical factors are conditions that require removal of degenerative nodular goiter. Many of the mechanical phases are overlooked. The trachea may be narrowed and constricted, or a nodular mass may protrude through the thoracic aperture into the mediastinum without being clinically apparent. This constriction or pressure may result in an increased respiratory rate, moderate tachycardia and often respiratory

embarrassment as a result of postural changes, the cause of which may not be suspected. The potentialities of nodular goiter, solitary or multiple, are not adequately appreciated by the practicing physician and need not be repeatedly emphasized.

Tumors of the Submaxillary Gland

Tumors of the submaxillary gland are less common than are tumors of the parotid gland. Duct obstruction resulting in distention and an obvious enlargement is quite common. Inflammatory reaction may result, and the gland becomes tender and painful.

In the event that a stone obstructs the duct, the size of the swelling may fluctuate, as the obstruction relents from time to time and permits a variable degree of drainage.

A stone may be removed by dilating the ampulla and expressing the stone. It may require an incision over the duct, which should be parallel to the duct and directly down on a palpated stone. This incision must be parallel to the duct and never oblique or transverse. If the calculi are multiple or previous infection and fibrosis are present the gland and duct must be removed.

The incision should be a curved one; the platysma is divided, the facial artery ligated, the gland carefully dissected from its bed and the duct removed from behind the geniohyoid muscle.

Tumors of the gland, which are nearly always mixed tumors, as they are in the parotid gland, are approached and removed in the manner just described. If carcinoma is present, neck dissection of all lymph-bearing tissue is essential.

Cystic Hygroma of the Neck

This is not a secretory tumor but an unsightly lymphatic enlargement resulting from sequestrations of the lymphatic tissue not connected with the normal lymphatic system, described by Goetsch.¹⁹

The mass is irregular and multilocular and has cystic compartments filled with a watery fluid. Pressure symptoms may result from the size of the tumor. These lesions are not to be confused with branchial cysts, enlarged lymph glands, cervical tumors or lipomas. The tumors are soft and irregular and not easily confused with the other cervical tumors.

It is not best to aspirate the cystic masses, apply irradiation or inject the cystic areas with sclerosing material. They should be removed surgically.

Summary

Tumors of the neck—Congenital defects of the neck are discussed from their embryonic origin, and the importance of complete excision of the defect to the origin is emphasized. The site or origin of the various congenital lesions is described, and the congenital failures of proper fusion resulting in these malformations are described.

The necessity of removal of the central portion of the hyoid bone in the presence of lesions of the thyroglossal tract is strongly asserted.

The development of aberrant thyroid tissue in the embriologic descent of the fetal thyroid is described. That it does occasionally occur is stated; it has been seen by the author.

The potentialities of discrete nodular goiter and multiple adenomatous goiter from the point of view of cancer, mechanical effects, cardiotoxic properties and cosmetic appearance are discussed.

Ductal stones in relation to the submaxillary gland, as well as their complications and management, are considered.

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Recognition and Early Management of

INFECTIONS of DENTAL ORIGIN

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THE AUTHOR

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Many people who do not have a family dentist will call their physician in times of suspected acute dental emergency. Inasmuch as this is so, it is important for the physician to recognize a dental infection and to have some idea as to treatment and prognosis. Practicing dentists at times find it difficult to establish whether or not they are dealing with dental infection or with some other acute emergency.

The cardinal signs of inflammation are often present in acute dental infection and, depending on the age of the patient, loss of function is sometimes present. The younger the patient the more severe the effect of acute dental infection. It is not unusual for a young child to become dehydrated in 24-36 hours and have a marked elevation of tem-

perature. This elevation may or may not be due to infection. More often than not it is due to dehydration. It is quite remarkable to see a young child who is dehydrated from being unable to eat respond to dental surgical procedures without antibiotics.

In acute inflammatory conditions of the

oral regions one must consider acute parotitis and acute sinusitis with dental manifestations. These, among other things, can appear to be dental infections.

Pericoronal infection of upper third molars can simulate parotitis. There can be marked swelling, cellulitis, temperature elevation and dehydration in as short period as 24 hours. Because of myositis and trismus, observation for a day or two may be necessary to establish a diagnosis. Infection of the salivary glands are much more easily differentiated from dental infection.

The young patient maybe seen with regional lymphadenopathy and a questionable oral infection. Sometimes the mouth will be clinically infected. The submaxillary and submental nodes are the first to be involved in dental infection. The anterior cervical chain is involved in infections from the posterior teeth. Posterior chain involvement is rather infrequent. Certainly if there is a dental infection, it should be eliminated.

It is important to remember that in most cases before starting a patient on antibiotics a diagnosis is established. The reasons are several. We should remember that the jaw bones are unusual in that they are the only bones with teeth and that no other bones in the body are comparable. Therefore, every infection is immediately a soft tissue infection and a boney infection also. Infections will often be arrested in the fascial planes of the neck and not localize; antibiotics often aid and abet this. Any need for dental surgery should be established prior to starting drug therapy. It is not unusual to see a patient with a deep seated chronic infection in the fascial spaces of the head and neck who has been on and off antibiotic treatment for months. If drugs are started before or without surgical intervention they may prolong the infection by reducing the normal defensive mechanism of the tissues.

Heat therapy, rest, good food, pain relief and incision and drainage where indicated may be of greater value than drugs. We know it is very difficult at times to decide whether or not it is best to start a patient on antibiotics or advise surgical intervention. Suf-

fice it to say that early surgical intervention with either incision and drainage or by the removal of teeth can sometimes preclude the use of drugs. With many people showing drug tolerance to various antibiotics it is important that indiscriminate use for dental infection does not become common practice. Many authorities suggest that if the patient does not respond to other definitive treatment then it is time enough to start antibiotics.

It is not desirable to routinely treat patients prophylactically with penicillin like drugs for dental surgery and dental infections. Many people have survived these infections prior to the wonder drugs with no apparent ill effects. In the patient who has organic disease such as rheumatic fever the antibiotics are given consideration. Most dentists appreciate consultation with the patients family physician in regard to these decisions and are more than willing to collaborate in managing patients with dental infection and organic disease.

In summation, many people call their family physicians for suspected acute dental infections. Correct diagnosis and early treatment may obviate long periods of treatment with antibiotics. Incision and drainage and/or dental surgery is still the treatment choice in many instances. It is often desirable to go ahead with dental surgery rather than wait for acute symptoms to subside. Infection of dental origin will always return following regression on antibiotic therapy. Some type of dental surgical treatment is needed, because of the unusual anatomical relationship of teeth, bones and soft tissues.

Head and neck infections which result from dental disease are bizarre and in many instances difficult to eliminate. Knowledge of the anatomy of the fascial planes is beneficial in treatment. Recognition and early diagnosis by the family physician may save many of their patients long periods of treatment for infection of dental origin.

(Phophylaxis is mandatory for patients with pre-existing rheumatic or congenital heart disease who are to have extractions. Editor)

A VISIT *with* HENRY SIGERIST

LAWRENCE C. McHENRY, JR., M.D.
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On March 17, 1957, we lost a man considered by many to be the world's leading medical historian. It might seem unusual that the *Journal of the Oklahoma State Medical Association* should take note of the death of Doctor Henry E. Sigerist, but it is certainly not inappropriate. Doctor Sigerist was very inspiring not only to me, but even more to Doctor Lewis J. Moorman, former editor of the *Journal*, who led the establishment of a medical history section of the Archives of the University. In this way our pioneer medical history will be preserved. It is not merely for the fact that Doctor Sigerist inspired a few of us in Oklahoma that we remember him, but it is because he was one of the few men in modern history who climbed to such heights in his chosen field. Doctor Sigerist had a grasp of the wide panorama of history that was phenomenal. He portrayed a personality which gave him the ability to express his ideas and knowledge in a manner which stimulated and at times enthralled his students.

Sigerist was a man not just of one nation, but of all nations, even though he loved his native Switzerland best. He was born in Paris in 1891, but obtained most of his early education at Zurich. His university and hospital days were spent in London and Munich. He received his M.D. degree from Zurich in 1917. Successively he was Professor of the History of Medicine in the Universities of Zurich, Leipzig and Johns Hopkins. He followed the great German medical historian, Karl Sudhoff, at Leipzig, and the noted American, William H. Welch, at Johns Hopkins. Sigerist had written some fifteen books on medical history and was a member of more than thirty medical history societies all over the world. In 1932 he came to this country and remained at Johns Hopkins until 1947 when he retired to his native Switzerland as a Research Associate at Yale University to complete his projected eight volumes of the history of medicine.

THE AUTHOR

Lawrence C. McHenry, Jr., M.D., received his A.B. degree from Pomona College, Pomona, California, in 1951 and his M.D. degree from the University of Oklahoma School of Medicine in 1955.

Doctor McHenry served a year's internship in Internal Medicine at the Boston City Hospital, Boston, Massachusetts, where he is now an Assistant Resident.

It is not out of place that we pause to remember this great man. Perhaps this short study will impart some of the feeling Doctor Moorman and I experienced on first meeting Doctor Henry Sigerist.

In the summer of 1953 when I was a student at the summer session at the University of Munich, I wrote to Doctor Sigerist in Pura, Switzerland. I told him that as an undergraduate student I had become quite interested in history. In the next two years at medical school, my historical interests focused on medical history. We had no formal instruction in medical history at the University of Oklahoma, but Doctor Moorman gave a series of lectures to the first year students each Monday morning at 8:00 a.m. These lectures served to further stimulate my interests in medical history. At the end of my second year I was determined to spend some time in Europe, knowing that this would be my last free summer. I was fortunate in receiving a Grant-in-Aid from the Student's Inter-national Travel Association to study at the University of Munich. I told Doctor Moorman of my fortune and he suggested that I visit Henry Sigerist. Who was Henry Sigerist? I had never heard of this great modern historian who had followed in the footsteps of both Sudhoff and Welch.

Doctor Moorman suggested first that I visit Doctor Shryock, Sigerist's successor at Johns Hopkins, on my way to New York. In Baltimore, I met Doctor Shryock who showed me around the Institute of the His-

tory of Medicine which is the largest center of Medical history research in this country. It is here that the *Bulletin of the History of Medicine*, which Sigerist founded, is published. Doctor Shryock and Singerfried Weisberger of the Peabody Bookstore told me of Doctor Sigerist and his influence as a teacher and medical historian. My anticipation to meet this man grew.

After sailing from New York I landed in Southampton, England. Following four to five two-day stopovers in London and Amsterdam, I journeyed up the Rhine, and in early July began school in Munich. In my first letter to Sigerist, Doctor Moorman asked me to "please give my regard to Sigerist and tell what you are doing in connection with my idea of tuberculosis and genius among physicians. Tell him I read with great interest his own case history in the book originated by my old friend, Max Pinner, M.D. I am sure he can give you some leads with reference to physicians who have suffered from tuberculosis, perhaps some not on our own list."

Doctor Moorman, who was at that time Dean of the Medical School, first met Doctor Sigerist in February, 1932, when he was invited to Oklahoma City before assuming his duties at Johns Hopkins. Doctor Sigerist gave a public lecture on "Medicine and Humanism" following an informal dinner. After that, Doctor Moorman and Doctor Sigerist became good friends and exchanged many letters on historical topics.

Doctor Sigerist was very prompt in his reply to my letter. He said, "I should be delighted to see you in Pura, and the weekend of August 1-2 would suit me very well. Pura is only a few miles from Lugano and has a nice hotel where you could spend the night, Hotel Paladina, and if you want me to, I could make a reservation there for you. If you inform the hotel with what train you are arriving in Lugano they would meet you and, of course, I would expect you for lunch or dinner with us. I was very happy to have news of Doctor Moorman for whom I have a profound admiration. It is just twenty-two years since I first met him and, of course, I have read all his books. Hoping

to see you soon, I am, Yours very cordially,
(signed) Henry E. Sigerist."

Needless to say, I was very excited by this letter!

On the morning of July 31st, I took an electric train from Munich through Southern Germany, across Switzerland to Lugano. Immediately on getting off the train I saw a small car marked "Paladina." The director of the hotel was very cordial, and the drive from Lugano to Pura was very picturesque. He told me that I was not the first to come to Pura to visit Doctor Sigerist. Many of the great men of all nations had been there in the past eight years. An Indian general had just preceded me. I was very pleased. Hardly had I arrived at the hotel when I was told that Mrs. Sigerist was calling. I shall never forget stepping into the phone booth in the quiet hotel lobby and hearing the voice of welcome of the Sigerists. I was to come down to the house the following morning.

Pura, as Doctor Sigerist said, "is a community of the Ticino, the Italian-speaking canton of Switzerland, only a few miles from the Italian border. The place was settled by the Romans. The population numbered 211 in 1591, increased to 418 in 1801, and is about 500 today." The small town is tucked into the warm green mountains overlooking Lake Lugano. The Paladina is about one-half mile below the town, and Doctor Sigerist's house is only a few minutes walk from the hotel. In the cleared areas on the slopes of the mountains and the valleys are the vineyards and the grain and corn fields tilled by the peasants in the same manner as they did 500 years ago. It is most peaceful near Pura for one can hear only the birds singing and church bells from the towns on neighboring mountains; occasionally a dog will bark to disturb the peace. Such a marked contrast, the antithesis of a Baltimore or a Paris. History had literally come to a stand-still there while the rest of Europe and America dashed on into the future. I could well see why Doctor Sigerist had chosen this spot, untouched for several centuries by the conflicts of more modern man.

About mid-morning the next day, I left

the hotel and rounded my way down the sunny gravel road to the gate and path through the garden to the Casa Serena. As I approached the veranda, a fine-looking lady inquired in a clear voice, "Mr. McHenry?" To my reply she answered, "Come up, Doctor Sigerist will be down in a moment." My first impression which was confirmed later, was that Mrs. Sigerist was the epitome of Swiss hospitality. I waited anxiously looking into the garden and below into the valley, until with the utmost warmth and cordiality Doctor Sigerist came out to greet me. Immediately my apprehension waned as Doctor Sigerist inquired into my trip, school at Munich, and Doctor Moorman, I felt as if I had always known him, and was merely seeing an old friend after a long separation. The enthusiasm and interest he showed completely enchanted me.

After a delightful native lunch, Doctor Sigerist told me of his present work in Pura. He was completing the second volume of his history of medicine, and had already assembled much of the third volume. He told me about his original plan of gathering material of the first 40 to 50 years of his life and then spending the next decade or so recording the vast array of experience and knowledge into a monumental history and sociology of medicine. It was thrilling to know a man who was seeing his greatest vision fulfilled. Later that afternoon he showed me through his library. I saw the Index Catalogue of the Surgeon General's Library that Doctor Arnold C. Klebs had owned, as well as many of his manuscripts and books which lined almost every wall of the entire house. Doctor Sigerist showed me pictures of his predecessors, Doctor Sudhoff and Doctor Welch, and the staff at the Institute of the History of Medicine in Baltimore. I was amused by the collection of books on cooking, which were above the couch on which he rested, in his study. I also saw for the first time that afternoon the remarkable works on medical history sculpture by Doris Appel. A similar set subsequently was donated to the Library of our School of Medicine.

Doctor Sigerist and I talked at length

that afternoon and evening. His concepts of the role of governments in human health and welfare were new to me. The scope of his historical knowledge seemed unlimited, and his tales about famous physicians made the past very vivid. He told me of the definite value of completing one's medical training before considering any formal study in history and literature. He stressed the immense insight gained from having acquaintances with many fields of endeavor; even more, he emphasized the value of knowing other than one's native language. His career and life indeed confirmed these examples.

The following day, August 1st, was the Swiss "Fourth of July," the celebration of their independence and freedom from war since 1210. That evening after a fine dinner with native Tessin wine, we all participated in the festivities and lit Chinese lanterns along the garden and on the veranda. As dusk set in mountain valleys, huge bonfires were lighted on the surrounding mountains, and later skyrockets shot up over the lake from the towns below. Such a fascinating display portrayed the unity Switzerland had stood for over the past seven centuries.

When I returned to Casa Serena the next day, Doctor Sigerist gave me several of his reprints, and autographed a picture for me. He also presented me with the native wine cup I had used at lunch the previous day. Later that afternoon we all went down to a neighboring town to have dinner at the water's edge of Lake Lugano. Afterwards Doctor Sigerist had to leave us, for he was to be in Geneva that evening. We all walked up to the electric train stop, and with a feeling of temporary loss for a new-found inspiration, I bade goodbye to my new friend, the world's leading medical historian.

So ends this story and tribute to a man who was not only a great historian, but a unique individual in history himself. Perhaps you can better see why Doctor Moorman and others thought so much of him. He inspired us all to learn something of the past, hence a little more about ourselves and the future.

Home of
Doctor Sigerist
in Pura, Switzerland



Pura, Switzerland

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Special Article

*This is the fourth in a series of articles prepared
by the University of Oklahoma School of Medicine*

The SCHOOL of MEDICINE

JOHN W. DeVORE, M.D.

The recent resignation of the salaried faculty members of the Department of Pediatrics following closely the resignation of Dr. Howard Hopps and four other professors in the School of Medicine demonstrates dramatically the urgent need for the physicians of the state to actively support an effort to gain adequate salaries and departmental budgets in the Medical Center. No institution can excel in any field of endeavor in the absence of competent and energetic personnel who have been provided with adequate supplies for their work. No institution of higher learning can long maintain high standards while losing outstanding professors.

Previous articles in this series have indicated that the salary scale in the School of Medicine is \$2,000-\$5,000 below the national average for state medical schools. In certain instances, the discrepancies are even more striking because of inadequate funds. The unfavorable position of the budget of the University of Oklahoma School of Medicine in relation to that of state medical schools in surrounding states has been increasing for several years. At present the budget provided by the state is approximately 50 per cent of the average of the other schools.

During the closing days of the legislature and the subsequent period, when the Regents for Higher Education will allocate funds for higher education to various institutions, we must actively support the allocation of essential funds to the medical center. Such funds must not come at the expense of other institutions for higher learning in the state. Funds available to institutions for higher learning, and consequently to the School of Medicine, will be limited to some degree. In the opinion of the author, the physicians of

THE AUTHOR

These articles have been prepared by the University of Oklahoma School of Medicine by John W. DeVore, M.D., instructor in the Department of Medicine. Doctor DeVore has had the cooperation and encouragement of the Faculty Board in the preparation of these papers.

the state should, in supporting the needs of the Medical Center, give priority to those needs which are essential to the functioning of the school within the next biennium. During the next two years we should continue to work so that in the following biennium there can be adequate funds for all of the Medical Center needs.

By consolidating the recommendations of the many members of the Faculty Board who have spent considerable time and effort aiding the author in the preparation of this series, the needs will be summarized in order of importance to the Medical Center as a unit. Of first importance in all departments is the necessity for bringing salary scales up to the standards of other institutions so that there will not be a steady loss of personnel. Second in importance is the provision of an adequate operating budget. Professors should spend their time in teaching and research, not in performing secretarial and other non-professional duties. Stocks of laboratory equipment and teaching aids should not be in the present depleted and outmoded state.

Next in importance is provision of adequate funds so that there will no longer be 92 beds unused, with the loss of 25,000 days of patient care each year. Since facilities of the clinical laboratory and the Department of Radiology are inadequate to meet the present load, the budgets of these departments must be increased adequately to permit them to serve not only the presently

occupied beds but also the 92 additional beds which should be again placed in operation.¹ The operation of the University Hospital at full capacity is of importance not only to the Medical Center teaching program, but to the citizens of Oklahoma. A recent letter sent to the Alumni association by their president indicates that an increase in state-allocated Medical Schools funds from \$692,000 to \$1,289,230 yearly, and an increase in the University Hospital allocation from state general revenue funds to \$2,856,246 annually, will be necessary during the next biennium if the needs outlined are to be met. In addition, the recommendation was made that the physicians of the state support the constitutional amendment, under consideration by the Legislature, which would require counties to pay for hospitalization of indigent patients in state-owned hospitals. Although such an amendment could not provide funds until 1959, other states have found that this is the best method of financing a University Hospital and permitting it to run at full capacity. A recent article on the Medical Center outlined the economic necessity for the establishment of a rehabilitation unit for the School of Medicine. The first two years of operation of such a unit would, through combined decreases in payment of public funds to disabled individuals and increases in taxes from the re-employment of such individuals, permit these facilities to be paid for within the first two years of operation. This estimate was based on experience of other states which have established such facilities.

The final need of the Medical Center is the construction of laboratory facilities for the School of Medicine. A wide majority of the members of the Faculty Board who have provided information to the author have indicated that such facilities are needed as soon as funds are available, but that the Medical Center's personnel and equipment needs must be met first. Especially critical is the need for animal facilities, the inadequacy of which is hampering the research projects of individuals within many departments. In addition, certain departments need to add essential personnel but will be unable to do so until additional office and laboratory facilities are available. Both

private and state universities find it easier to obtain funds for construction of buildings than those for personnel and operating budgets, making it essential for us to be especially diligent in support of the latter funds.

In presenting this series, the author regrets that he has been unable to detail the development of the excellent teaching program in all departments. The needs of the Department of Physiology with Dr. A. N. Taylor as chairman, are similar to those described for departments discussed in previous articles in this series. Under the chairmanship of Dr. Kirk T. Moseley, the Department of Preventive Medicine and Public Health which was organized during the war years, has grown rapidly until it now provides teaching in preventive and industrial medicine and aids in the teaching in many other departments of the Medical Center. The stimulus to the growth of the department is due in part to the generous support of the W. K. Kellogg foundation and others. The support of essential personnel and programs in this department through outside grants cannot continue indefinitely so that increasing state funds must be provided for this purpose. This department, as all others, has been severely handicapped by the inadequacy of its maintenance and equipment budget. Similarly, in clinical departments, such as surgery, there is continuing growth which will require support through the budget of the Medical School. The Department of Obstetrics and Gynecology will, because of the increasing teaching and service load require some full-time professional, technical and administrative personnel. If these multiple needs of the School of Medicine are to be met, the active support of the physicians of the state will be a major contributing factor.

The editors of the *Journal* and the administration of the School of Medicine have agreed that in subsequent articles, rather than continuing the discussion of the financial needs of the institution, there should be a report of the excellent research in various medical fields in progress at the University of Oklahoma Medical Center.

1. In a recent conference in another University Hospital having a 50% greater patient load, it was learned that the laboratory budget is 900% greater than at our Medical Center.

PRESIDENT'S LETTER



We are living in a changing world, but certain basic principles I learned as a child are today applicable to our way of life.

First, no one is particularly interested in an alibi, but may out of politeness stand and listen.

Secondly, actions speak louder than words.

During the past few years there has been much criticism of the medical profession. In rebuttal the Doctors have offered many explanations and have attempted to defend untenable positions with the net result that no one was really convinced or changed his way of thinking.

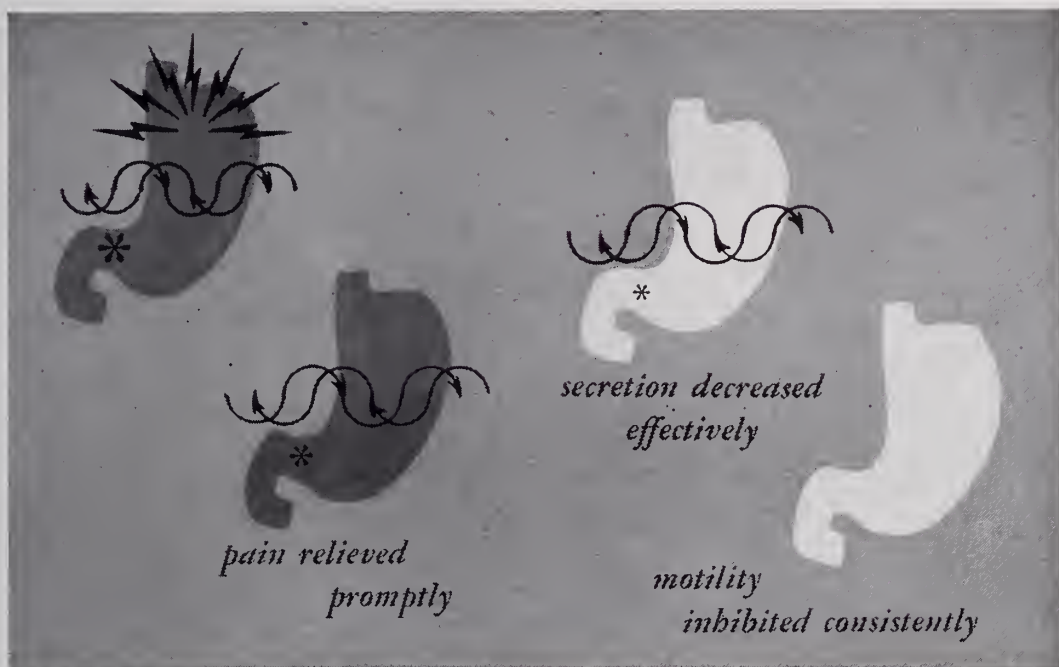
Throughout the coming year I should like to offer to the members of the medical profession of the State of Oklahoma a positive and not a negative program. I should like to see every individual Doctor resolve:

1. That I will put in more effort and offer a little more attention to each and everyone of my patients.
2. That service to my patients will be my primary concern and monetary remuneration will be secondary, ever mindful to be diligent in the care of the poor and needy.
3. That I will at all times be charitable with my fellow practitioners, keeping a closed mouth and extending a helping hand and when needed will "Go that extra mile."
4. That I will be an active citizen in my community, serving on charity drives, participating in Chamber of Commerce and Civic Club activities, being active in school and various youth organization endeavors and at all times using my franchise by voting.
5. Lastly, by thinking positively in my endeavors to be of service I will have no occasion to be defending a negative position.

John Flack Burton, M.D.
President

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Among the many clinical indications for Pro-Banthine (brand of propantheline bromide), peptic ulcer is foremost. During treatment, Pro-Banthine has been shown repeatedly to be a singularly valuable agent when used in conjunction with diet, antacids, sedation and psychotherapy as required. Lichstein and his associates* report that Pro-Banthine "proved almost invariably effective in the relief of ulcer pain, in depressing gastric secretory volume and in inhibiting gastrointestinal motility. The

incidence of side effects was minimal. . . ."

The therapeutic utility and effectiveness of Pro-Banthine in the treatment of peptic ulcer are repeatedly confirmed in the medical literature. Dosage: One tablet with each meal and two tablets at bedtime. G. D. Searle & Co., Chicago 80, Illinois, Research in the Service of Medicine.

*Lichstein, J.; Morehouse, M. G., and Osmon, K. L.: Pro-Banthine in the Treatment of Peptic Ulcer. A Clinical Evaluation with Gastric Secretory, Motility and Gastroscopic Studies. Report of 60 cases, Am. J. M. Sc. 232:156 (Aug.) 1956.

SEARLE

Association Activities

Television's 'Doctor Hudson' Visits OSMA Executive Offices

Actor John Howard visited the Executive Offices of the Oklahoma State Medical Association during his stay in Oklahoma City the weekend of April 19. The trip to the State's capitol city was in conjunction with Howard's nation-wide publicity tour.

Howard, best known for his television portrayal of "Doctor Hudson" in "Doctor Hudson's Secret Journal," gave a boost to the Association's "Cavalcade of Health" by posing for publicity pictures with Juno, the plastic woman. The display is expected to be one of the biggest attractions at Oklahoma's Semi-Centennial Exposition June 14 through July 7.

On hand Friday to greet the distinguished guest were: H. M. McClure, M.D., President of the Association; Henry H. Turner, M.D., Chairman of the Cavalcade of Health Committee; Dick Graham, Executive Secretary; and Don Blair, Associate Executive Secretary. Doctor McClure extended personal greetings to Howard and then presented the actor with a written salutation from the Association.

Impressed With Juno

Howard was very impressed with the display which was built in Germany at the cost of \$50,000 and loaned by its owner the Dominican Republic for the celebration and asked to come again the next day so that his wife might see it.

The transparent plastic figure is an exact replica of a 28-year-old woman and clearly indicates the systems of the human female body. Principal internal organs of the figure illuminate in synchronization as the simulated voice of the figure explains the function of each.

Mr. Howard expressed great interest in the Association's plans to present the Cavalcade of Health at the Semi-Centennial Exposition. Over forty organizations will participate in the Cavalcade and will present health education exhibits to the general public.

TV's Doctor Hudson explained that his program was designed to show the human



INTERESTED ONLOOKERS watch as local television newscaster interviews John Howard.



A DISTINGUISHED VISITOR for Juno, the plastic woman, was John Howard (second from right), known for his television role as "Doctor Hudson" in "Dr. Hudson's Secret Journal." Discussing the display with him are H. M. McClure, M.D., (left) President of the Oklahoma State Medical Association, and Henry H. Turner, M.D., Chairman of the Cavalcade of Health Committee.

side of the practice of medicine. "We stick fairly close to the philosophical approach," Howard said, "and try to stay away from the medical subjects of a controversial nature."

'Doctor's Day' Observed Throughout the State

Physicians throughout the State joined those of the nation in being honored when mayors of cities and towns in Oklahoma proclaimed March 30 "Doctor's Day" "in appreciation of the services rendered to mankind by the members of the medical profession."

The idea of Doctor's Day originated in Georgia by Mrs. C. B. Almond, of Winder, Georgia, in 1933. It was introduced to the Woman's Auxiliary to the American Medical Association in 1934, and the Southern Medical Association in 1935.

The date selected for Doctor's Day was March 30 which commemorates the day that Doctor Crawford W. Long of Jefferson, Georgia, first used ether anesthesia in surgery.

The Woman's Auxiliaries to the county medical societies honored their husband-physicians in many ways on "their day."

A lovely dinner-dance held in the Lake Murray Lodge ballroom honored physicians of the Carter-Love-Marshall county medical society.

The Kiowa-Washita auxiliary observed National Doctor's Day by honoring their husbands with a dinner at the Quartz Mountain Lodge.

The Washington-Nowata Medical Society received red carnations, the official flower of the day, from members of their Auxiliary.

On the Sunday preceding Doctor's Day, members of the Woman's Auxiliary to the Garfield-Kingfisher County Medical Society prepared and placed bouquets of red carnations at the altars of Enid churches where the local doctors are members. Later Garfield-Kingfisher physicians were honored by the Auxiliary at a dinner party in the Oakwood Country Club of Enid.

A dinner planned by the Woman's Auxiliary honored physicians of Cleveland and McClain Counties. The party was held in the ballroom of the Officers' Club, Naval Air Technical Training Center, Norman.

A buffet dinner was served to the Grady County doctors in the Public Service auditorium in Chickasha to honor them on Doc-

tor's Day. The hostesses for the occasion, members of the Woman's Auxiliary to the Grady County Medical Society, presented each physician with a red carnation.

Festivities on the eve of National Doctors Day at Tulsa's Oaks Country Club honored Tulsa County physicians. The dinner was sponsored by the Tulsa County Medical Society Auxiliary.

Members of the Pittsburgh County Medical Society were guests of honor at a dinner held at the Isle of Capri in McAlester and sponsored by the auxiliary. Clever caricatures adapted from carnival sideshow themes were used as backdrops on the stage for flash bulb pictures of the different physicians. After dinner, the members and their guests enjoyed dancing to special hi-fi recordings.

Regents Name 22 Preceptors For Medical School Seniors

The Board of Regents of the University of Oklahoma School of Medicine recently approved 22 Oklahoma physicians to be supervisors of medical school students who will be serving preceptorships throughout the State.

State doctors approved as preceptors are: Carl H. Bailey, M.D., Stroud; Lynn C. Barnes, M.D., Nowata; M. A. Connell, M.D., Picher; and Edward T. Cook, Jr., M.D., Anadarko; and John M. Carson, M.D., Shawnee.

Also appointed were: Walter H. Dersch, Jr., M.D., Shattuck; Joe L. Duer, M.D., Woodward; Tom L. Wainwright, M.D., Mangum; George Gathers, M.D., Stillwater; Robert B. Gibson, M.D., Ponca City; Kenneth Godfrey, M.D., Okeene; Burdge F. Green, M.D., Stilwell; W. C. McCurdy, Jr., M.D., Purcell; E. A. McGrew, M.D., Beaver; and James S. Petty, M.D., Guthrie.

Cody Ray, M.D., Pawhuska; H. V. Schaff, M.D., Holdenville; Edward T. Shirley, M.D., Wynnewood; Carlton E. Smith, M.D., Henryetta; Ray E. Spence, M.D., Pauls Valley; Aubrey E. Stowers, M.D., Sentinel; and C. A. Traverse, M.D., Alva.

Doctor Rice Receives Tribute From 'Babies'

Nearly sixty years of community service filling the life of a pioneer physician unfolded at a banquet staged at the Aldridge Hotel in McAlester on the eve of National Doctor's Day. The banquet was the climax of a day-long "Doctor O. W. Rice Day" celebration which was formulated by the pioneer doctor's "big babies."

Nearly one hundred persons gathered to pay tribute to O. W. Rice, M.D., early-day physician who had officiated at most of their births. Sprinkled among the crowd were some of the doctor's personal friends for more than half a century. Telegrams and letters of congratulations from former patients now living in different states and communities were read and early day "horse and buggy" pictures were on display.

Special guests for the occasion were the members of the Pittsburg County Medical Society.

Another highlight of the day was an open house party in the Rice home where old-time friends and "big babies" came by to visit or reminisce.

Doctor Rice was graduated from Rush Medical College in Chicago, Illinois, in 1897. Coming to Indian Territory after one year of practice in Missouri, he first opened practice at Canadian. Most of his early years were spent at Alderson. In 1923, he moved his medical practice to McAlester.

One of Doctor Rice's pioneer friends recalled that it was probably the salary that enticed the young physician to Indian Territory. The standard rate for family medical service was \$1 per month with an extra \$5 for obstetrical cases.

A resolution adopted by the Pittsburg County Medical Society and presented to Doctor Rice was read to the group at the banquet. It stated:

"WHEREAS, Doctor O. W. Rice has been a member of this Society since its organization, and

WHEREAS, he has been engaged in the practice of medicine in this locality for nearly sixty years administering to the needs of a large clientele, giving of his professional ability to rich and poor alike, under, on many occasions, the most trying and difficult circumstances, and

WHEREAS, as he has by his unselfish service endeared himself to the many citizens with whom he has come in contact, bringing relief in their suffering, consolation in their hour of sorrow, and sharing with them in their joys and happiness,

THEREFORE BE IT RESOLVED, that we, his fellow physicians, extend to him our most sincere congratulations and wish for him great consolation in realizing that he has accomplished much in the service to humanity."

Doctor Rice is a member of the American Medical Association, a life member of the Oklahoma State Medical Association and the Pittsburg County Medical Society which organization honored him with a fifty-year pin. Heretired last fall at the age of 85.

Sand Springs Honors C. E. Calhoun, M.D.

March 25 was "Doctor Charles Edward Calhoun Day" in Sand Springs as a busy community paused to honor a man who served the area for 47 years.

Doctor Calhoun was presented a certificate and an honorary life membership in the Chamber of Commerce at a dinner meeting held in his honor.

C. E. Calhoun, M.D., was the son of a farmer and grew to young manhood on an Alabama farm. In 1903 he received his M.D. degree from Maryland Medical college.

Doctor Calhoun first practiced medicine in Shawnee. He came to what is now Sand Springs in 1910 as the official physician for the Sand Springs Home interests and the Sand Springs railroad. Four years ago he "retired." His downtown office was closed and a small "shop" opened behind the family dwelling where he continues his practice in a limited way. He has been a practicing physician for the past 54 years.

Doctor Calhoun is a member of the American Medical Association, the Oklahoma State Medical Association, and the Tulsa County Medical Society which recently honored him with a 50 year pin.

R. C. Pigford, M.D., Named Tulsa's 'Doctor of the Year'

Russell C. Pigford, M.D., who has spent 22 years as a specialist in Cardiology and Internal Medicine was acclaimed Tulsa's "Doctor of the Year" by the Tulsa County Medical Society's Auxiliary. The tribute to Doctor Pigford was made at a banquet at Tulsa's Oakes Country Club which marked the 1957 observance of Doctor's Day.

Doctor Pigford was graduated from the Tulane University School of Medicine in 1924 and entered practice in Tulsa four years later. However, Doctor Pigford has not practiced medicine since 1950. In that year he fell victim to a coronary attack.

Doctor Pigford holds a fellowship in the American College of Physicians, is a diplomat of the American Board of Internal Medicine, a member of the American Therapeutic Society and a charter member of the Tulsa Internists Association. He also is a member of the American Medical Association, the Oklahoma State Medical Association and the Tulsa County Medical Society which organization he served as president in 1940.

Doctor Shepard Honored By Tulsa TB Association

More than 200 persons knew it, but the presentation of an honorary life membership in the Tulsa County Tuberculosis Association came as a distinct surprise to Robert M. Shepard, Sr., M.D. of Tulsa.

Friends and co-workers gathered at a testimonial dinner at the University of Tulsa to honor the Tulsa physician for more than 28 years of service in the field of tuberculosis control.

It was estimated that Doctor Shepard had read over one million chest x-rays.

G. R. Russell, M.D., President of the Tulsa County Medical Society presented the certificate.



JOSEPH E. BROOKSHIRE, M.D., (right) pioneer Tulsa obstetrician and gynecologist, receives a 50-year Club Pin from Wendell L. Smith, M.D., Councilor to the Oklahoma State Medical Association. The presentation was made at the Tulsa County Medical Society meeting of April 8, 1957. Doctor Brookshire is a graduate of the University Medical College of Kansas City, Missouri. He entered practice at Welch, Oklahoma, in 1907, and later practiced at Nowata, where he was President of the Nowata County Medical Society. Doctor Brookshire has been practicing in Tulsa since 1923.

Fifth National Medical Civil Defense Conference To Be Held

The date of June 1 has been set for the Fifth Annual National Medical Civil Defense Conference sponsored by the Council on National Defense, American Medical Association. The 1957 meeting will be held in New York City in the Waldorf-Astoria Hotel's Sert Room.

The one-day session will start at 9:00 a.m. and close at 5:15 p.m. The Council sponsors the Conference luncheon and there will be no registration fees or other charges in connection with attendance. Those wishing to attend merely need write Frank W. Barton, Secretary, American Medical Association, 535 North Dearborn Street, Chicago 10, Illinois giving name and address and if they will stay for the luncheon.

In addition to a very fine program, the Council has arranged for the FCDA to display a radiological exhibit which will be monitored by Mr. Fred Oleson, Radiological Defense Officer from the Harvard, Massachusetts, district.

Congress of Legal Medicine And Law-Science Set for July

The First American Congress of Legal Medicine and Law-Science Problems will be conducted by the Law-Science Institute at the Hotel Morrison, Chicago, during July. Cooperating in the effort will be the Law-Science Academy of America and the Law-Science Foundation of America.

Although the Law-Science courses have been attended by several thousand lawyers during the last seven years, this year marks the first time the Congress has been publicized to both professions. This year's meetings will contain features of great practical interest and value both to lawyers and physicians.

The institute will extend over a two-week period with the first session opening Monday, July 8, and going through Saturday, July 20, 1957. During this time the regular Basic Law-Science Short Course on "Legal Medicine and Elements of Medicolegal Litigations" will be offered. Meeting simultaneously will be an advanced course for lawyers who have already attended the Basic Course.

The second week of the Congress which will be July 15-20, 1957, will be advanced instruction in Medicolegal Aspects of Personal Injury Problems. The instructional material offered in the second week will be essentially different from that presented during the first week.

It is anticipated that between 125 and 150 lecturers will take part in this two-week period, drawn from the ranks of eminent medical specialists throughout the nation and top trial lawyers from both sides of the bar.

Registration

The registration fee for the Basic Short Course will be \$100. A person may register for any one day of the Short Course, but not for less, at a fee of \$20 per day.

Additional information regarding the Congress can be obtained by writing Dr. Hubert Winston Smith, Law-Science Institute, University of Texas, Austin 12, Texas.

Professional Liability Is Subject of A.M.A. Film

The second film in the A.M.A.-American Bar Association series on "Medicine and the Law" will deal with prevention of professional liability action, it was announced recently by Dr. George F. Lull, secretary and general manager of the A.M.A. Titled "The Doctor Defendant," the film will be available from the A.M.A. Film Library for medical society or association showings, beginning July 1.

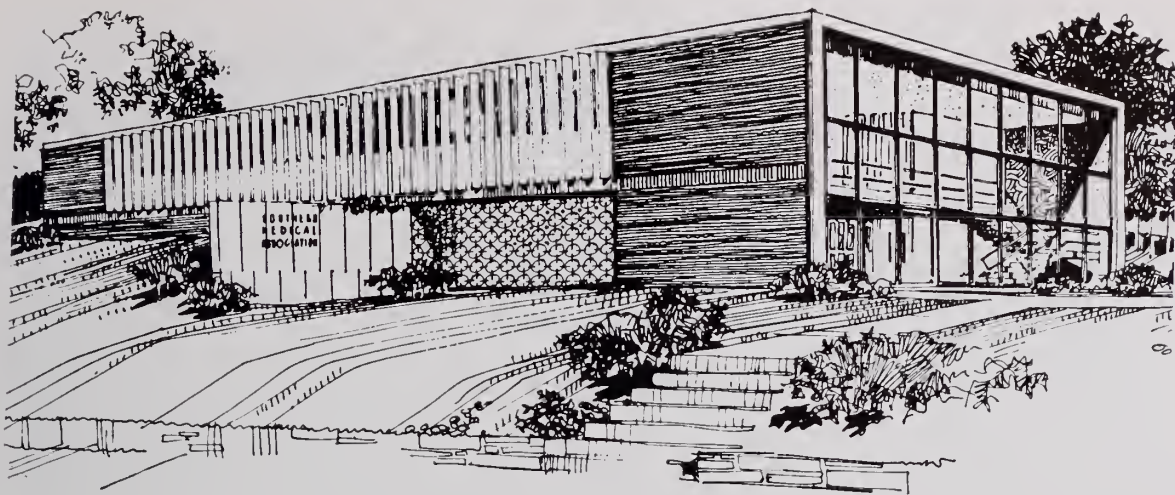
The new film dramatically presents four case reports of situations which caused legal action against physicians. In reviewing these alleged mal practice cases, the 30-minute black and white sound film also demonstrates how a professional liability committee functions. It will be premiered at the A.M.A. convention in New York City on June 5.

"The Doctor Defendant" is a companion film to "The Medical Witness" in the series produced by The William S. Merrell Company, Cincinnati, Ohio, ethical pharmaceutical laboratories, in cooperation with the A.M.A. and the A.B.A., as a service to the medical and legal professions.

"The Medical Witness" depicts right and wrong methods of presenting medical testimony by re-enacting a personal injury trial. It was named by *The New York Times* as one of the best 16 mm. films produced in 1956. It has broken records for number of medical society showings and audience sizes to date, according to the A.M.A. Film Library.

Medical societies and associations are urged to arrange advance booking dates now for "The Doctor Defendant" for 1957 and 1958 showings. "The Doctor Defendant" can also be booked together with "The Medical Witness" as part of a legal medicine seminar.

Societies desiring to show either or both films may write to the Film Library, American Medical Association, 535 North Dearborn Street, Chicago 10, Illinois, or to Dr. John B. Chewning, director of professional relations, The Wm. S. Merrell Company, Cincinnati 15, Ohio.



Future Home of the Southern Medical Association

Construction Begins on New Southern Medical Headquarters

The Southern Medical Association's new \$100,000 permanent headquarters building is now under construction in Birmingham, Alabama.

Situated on a lot of nearly one acre, the split-level structure will front Highland Avenue. The first level will include a lobby, storage rooms and an office for the Auxiliary to the Southern Medical Association. On the second level will be a second lobby, a conference-library room, executive offices, editorial offices of the *Journal*, a mailing room, an employe lunch room and additional office-work space.

An employee parking lot will be built on the high ground at the southeast rear corner of the lot, with an entrance directly into the second level of the building. A visitors' parking lot will be built at the front.

Constructed of modern materials, the impressive building will contain 6,854 square feet of floor space. It is conveniently located near the Medical Center where all facilities and services such as public transportation, banking, printing and engraving are available.

Fifty years old, the Southern Medical Association has 10,000 members in sixteen southern states, the District of Columbia, Puerto Rico and the Canal Zone. W. K. West, M.D., Oklahoma City, is President-Elect of the organization and Henry H. Turner, M.D., Oklahoma City, serves on the Executive Committee.

Oklahoma City to Host National Society of Nuclear Medicine

Top nuclear scientists in medicine and industry will be among those attending the annual meeting of the National Society of Nuclear Medicine to be held in Oklahoma City June 20-23, 1957.

The Society, which has approximately 800 members, will be in session each day from 8:00 a.m. to 5:00 p.m. in the Persian Room of the Skirvin Tower hotel. Daily luncheons will be held in the Venetian and Continental Rooms of the Skirvin. The Annual Banquet will take place Friday, June 21, in the Venetian Room.

Numerous interesting and instructive scientific exhibits will be on display at the hotel. Highlighting the meeting will be a trip to see the live training atomic reactor in operation at the Cavalcade of Health which is sponsored by the Oklahoma State Medical Association. This health education show will be held in conjunction with the Semi-Centennial Exposition at the Oklahoma City Fairgrounds.

Members of the Oklahoma State Medical Association and those interested in the fields of nuclear science are invited to attend according to Henry H. Turner, M.D., Oklahoma City, who is handling local arrangements for the meeting. The registration fee is \$10.00.

'Fight For A Free World' Viewed by 500 Physicians



Nearly 500 Oklahoma physicians joined those of thirteen other states in viewing the live, closed-circuit television program, "Fight for a Free World" which was produced exclusively for the medical profession by Pfizer-Roerig Laboratories.

H. M. McClure, M.D., President of the Oklahoma State Medical Association, presided at the dinner which preceded the program held at the Oklahoma City Golf and Country Club on April 10.

The program on how we fight communism was conducted in a question-answer manner. A panel of questioners, consisting of outstanding political analysts, asked questions of internationally known authorities on communism.

Acting as moderator on the program was Lawrence E. Spivak, an originator and producer of "Meet the Press" television program. He was publisher of *The American Mercury* magazine in 1939-1950.

Members of the panel were: Marquis Childs, one of America's foremost newsmen. His column appears in the *St. Louis Post-Dispatch* and in over 125 other newspapers. He is author of numerous books including *Sweden: The Middle Way* which is widely used as a reference book. His exclusive interview with Tito of Yugoslavia gave him



Sharing honors at the head table were (left to right): Malcom E. Phelps, M.D., President of the American Academy of General Practice; H. M. McClure, M.D., President of the Oklahoma State Medical Association; John F. Burton, M.D., President-Elect of the O.S.M.A.; and M. M. Appleton, M.D., President of the Oklahoma County Medical Society.

an important picture of Soviet tactics.

Eugene Lyons, the first American newsman to interview Stalin, is one of the nation's leading authorities on Soviet Russia and Communism. His most recent book, *Our Secret Allies* develops the thesis that the Soviet empire can be overthrown from within by its own victims. He is now Senior Editor of *The Readers Digest*.

Mrs. May Craig, nationally known as a panel member of "Meet the Press," is Washington correspondent of the Portland, Maine, *Press-Herald*. She has traveled inside the Soviet Union, Poland and Czechoslovakia.

Doctor Allman to Assume A.M.A. Presidency in June

The American Medical Association's presidential oath of office will be administered to David B. Allman, M.D., of Atlantic City, New Jersey, in impressive ceremonies at 8:30 p.m., Tuesday, June 4, in the grand ballroom of the Waldorf-Astoria Hotel, New York. Besides Dr. Allman's inaugural address, the program will also feature musical selections by the United States Army Chorus, Washington D.C.; remarks by out-going President Dwight H. Murray, M.D., of Napa, California, and presentation of the Distinguished Service Award to the recipient selected by the House of Delegates.

A portion of the inaugural ceremony—from 9 p.m. to 9:30 p.m.—will be telecast over New York station WABD, Channel 5.

Immediately following the ceremonies, Doctor and Mrs. Allman will receive physicians, exhibitors and guests at the annual reception in the east ballroom. The presidential ball will begin at 10 p.m. and continue until 1 a.m. in the grand ballroom.

Ned Brooks is heard regularly on "3 Star Extra" and for three years has been moderator of "Meet the Press."

The authorities questioned by the panel were: General J. Lawton Collins, now retired, who was Chief of Staff of the United States Army 1949-1953. General Collins was also a representative to the Military Committee of NATO and, with the rank of Ambassador, to free Vietnam at the time it was threatened by the Communist penetration.

Leon Keyserling, formerly chairman of the President's Council of Economic Advisors for three years, is now a consulting economist and lawyer. Mr. Keyserling is recognized in this country and abroad as one of the free world's foremost economic experts.

Vladimir Poremsky is President of the National Alliance of Russian Solidarists, the organization that directs the underground activity inside the Soviet Union. He is high on the Soviet Secret Police's list of men to be liquidated. He came to the United States from his headquarters in Europe to appear on the telecast.

State Physician to Speak At A.M.A. Annual Meeting

Henry H. Turner, M.D., Oklahoma City, will speak before the members convened for the American Medical Association's 106th Annual Meeting to be held in New York City on June 3-7, 1957.

Doctor Turner will speak on the subject "Recent Advances in Endocrinology" at the General Scientific Meeting on Monday, June 3 at four o'clock in the afternoon.

Burney Sees Current Polio Vaccine Shortage Easing

Surgeon General Burney concedes there's a "crisis" in poliomyelitis vaccine supplies now but believes the shortage will begin easing up around April 15. At the time of this writing, however, it is not known when adequate supply will be available in Oklahoma. The Public Health Service chief was called before a House Government Operations sub-committee which said it wanted to find out about the "feast-and-famine" aspect of Salk vaccine. Doctor Burney attributed the current short supply to an "almost precipitous" increase in sales in the past few weeks.

The public demand, in turn, was a result of a number of factors: The American Medical Association's campaign to spur state and local society action in giving shots, President Eisenhower's plea for increased use and distribution of inoculation forms during the March of Dimes campaign. Questioning also developed that the five firms producing the vaccine were not operating at capacity for the second half of 1956.

Other highlights of the Burney testimony: (1) there has been about a 20 per cent drop in the price of the vaccine, (2) there is still remaining about \$9 million out of a total of \$53.6 million made available to the states for supplying free vaccine to state and local programs, (3) there should be enough vaccine available between now and July 1 to inoculate all persons under 20 at least twice, and (4) as of March 15, almost 56 million persons had one or more injections, with 46 million of these under 20 or pregnant women.

Study Reveals Nation's Need For Professional Nurses

The need to attract more young people to a career in professional nursing and to expand nursing school facilities to train enlarging student bodies is cited in a study issued recently by the National League for Nursing. The study, published under the title "Nurses for a Growing Nation," was released to the organization's membership at its biennial convention in Chicago, May 6-10.

From a present 430,000 professional nurse—or a ratio of 258 to every 100,000 people—the nation will need 600,000 nurses by 1970 to increase the ratio to 300 for this population segment, and 700,000 nurses to raise the ratio to 350. The study assumes that the ratio should be bettered nationally in view of the many nursing positions that remain vacant, the hospital services curtailed for lack of professional nurses and the needs to expand nursing service in public health, industry and other fields.

If nursing continues to attract its present proportion—four per cent—of the growing number of college-age girls, the profession can expect to reach the 300 ratio by 1970, the study points out. However, a national goal of 350, already reached or exceeded by six states, can be attained only if some of the currently-operating trends in nursing are reversed. Among the factors that may make it possible to reach the higher goal are: 1) attracting more students to nursing than present trends anticipate, and 2) reducing the high withdrawal rate in schools of professional nursing to assure more graduates.

Nursing schools face unprecedented expansion if the ratio of nurses to population is to be maintained, and especially so if more students are to be prepared to meet the heavy demands for nursing service. The study reveals that if the current annual rate of approximately 45,000 admissions to schools of nursing continues, the ratio of nurses to population will drop from its present 258 to 246, when instead there is an obvious need to increase it.

The extent to which the two major types of basic education programs in nursing—diploma-associate degree programs in hospital and junior colleges and baccalaureate

degree programs in colleges and universities—is indicated in the study by applying educational patterns in nursing to the job responsibilities of professional nurses. Nurses who work under supervision, such as bedside nurses in hospitals and doctor's office nurses prepare in diploma and associate degree programs, the study reveals. These nurses compose 67 per cent of the professional nurses in active nursing jobs. The remaining 33 per cent who become head nurses, public health staff nurses, teachers, administrators and supervisors should prepare initially in baccalaureate degree programs and the portion of these nurses who go on to top leadership positions should undertake graduate study.

Although the consensus of many nursing educators bears out this conclusion of the NLN researchers, "Nurses for a Growing Nation" marks the first published statement on the job responsibilities for which the various basic nursing programs appropriately prepare students. The study points out, however, that education alone does not make a good nurse.

Regional, state and local leagues for nursing and other planning groups are charged by the NLN with responsibility for applying the study to their own areas and communities and of stimulating public discussion of the findings. Public support of programs to expand nursing education facilities and to obtain the many nursing teachers who will be needed to train the students, is urged strongly in the study. It also raises as a significant question: How can the cost of expansion in nursing education be met?

"Nurses for a Growing Nation" is a 36-page booklet, printed in two colors, using graphs and charts. It sells for 35c a copy from the National League for Nursing, Two Park Avenue, New York 16, N. Y.

First Annual State Future Nurses' Day Meeting Held

The First Annual Oklahoma State Future Nurses' Day meeting convened April 6 at the Oklahoma University School of Medicine. Nearly 600 members representing high-school across the state attended the day-long



A portion of the audience of nearly 600 girls who participated in the first annual state Future Nurses Day meeting.

session sponsored by the Oklahoma State Medical Association's Woman's Auxiliary, the Oklahoma League for Nursing, and the Oklahoma State Nurses' Association.

Coordinating all arrangements was Mrs. Clifford M. Bassett, Cushing, Chairman of the Auxiliary's committee. The culmination of the meeting involved months of planning and represented one of the greatest coordinated vocational guidance endeavors ever held in the state.

The event began at 9 a.m. in the auditorium of the Medical School with registration and a coffee hour. Greeting the group were Mark R. Everett, M.D., Director, University of Oklahoma Medical Center and Mrs. Gordon Livingston, President of the Oklahoma State Medical Association's Woman's Auxiliary.

H. M. McClure, M.D., President of the Oklahoma State Medical Association was the principal speaker. Doctor McClure took as the topic for his speech the theme for the meeting, "Hands to Serve." He first pointed out the "don'ts" of choosing one's vocation warning the audience that a person should not be influenced by relatives' whims . . . glamour . . . monetary remuneration or the security offered by a profession.

"Rather," he said, "enter it (the profession) for the happiness you will find. There is no greater satisfaction than being able to assist someone to good health."

He went on to urge girls to examine themselves "critically and honestly" to see if they were suited for careers in nursing. Heading the list of attributes a good nurse should possess were an insatiable curiosity, courageous optimism, and flexibility. Other qualities he named were "horse sense" or the innate ability to make decisions quickly and sensibly without outside help, moral and intellectual integrity, warmheartedness. Lastly, she must be drawn to the profession by her idealism rather than the earnings it might offer.

Other members of Mrs. Bassett's Committee who helped plan the meeting were: Mrs. Majel Manning, Mrs. Charles A. Smith, Mrs. Gordon Livingston, Mrs. George R. Smith, and Mrs. J. Douglas Green.

Committee on Careers, Oklahoma League for Nursing, Oklahoma State Nurses' Association Committee Members were: Miss Evelyn Karm, Chairman, Miss Addie Alexander, Mrs. Edna Livingston, Mrs. Mary Amadon, Sister Mary Alberta, Miss Mildred Dorffeld, and Miss Elizabeth Wiebe.

A.M.A. Annual Meeting In New York June 3-7

More than 18,000 physicians will gather in New York June 3-7 for the 106th annual meeting of the American Medical Association.

This is a unique convention in that its major purpose is to provide "under one roof" an opportunity for doctors to catch up on hundreds of aspects of rapidly changing medical knowledge. More than 500 doctors will present scientific papers or participate in symposiums and discussion groups.

There will be 400 scientific exhibits—the largest number ever shown at an A.M.A. meeting—in the New York Coliseum, the city's new exhibition hall. In addition, 335 technical exhibits will be displayed by pharmaceutical houses, medical equipment firms, and other manufacturers.

The House of Delegates, the A.M.A.'s policy-making body, will meet throughout the week in the Waldorf-Astoria, headquarters for the meeting. Scientific sessions will be held in the coliseum and a number of New York hotels.

A special feature of the meeting will be an international medical film program in addition to the regular medical film program. More than 20 foreign countries are sending special films dealing with many aspects of medical science for the program, which will be held in the Barbizon Plaza Hotel.

The scientific session will open Monday morning, June 3, with a review of recent progress in surgery. The afternoon session will deal with recent advances in medicine. Tuesday morning's general meeting will feature a discussion on the use and abuse of mood-altering drugs in daily practice.

The House of Delegates' first action will be the election of a physician to receive one of medicine's highest honors, the Distinguished Service Award.

Dr. Dwight H. Murray, Napa, California, retiring president of the A.M.A. and his successor, Dr. David B. Allman, Atlantic City, New Jersey, will address the opening session of the House. Doctor Allman will be inaugurated Tuesday evening.

Annual A.M.A. Golf Tournament

The American Medical Golfing Association will hold its Forty-First Tournament June 3, 1957 at the well known Westchester Country Club, Rye, New York. It is a championship layout, with beautifully cared for greens and fairways. This famous resort provides two eighteen hole courses, a Beach Club on Long Island Sound, tennis courts and even a polo field.

As in the past few years, eighteen hole competition will determine championships and will be the basis for the awarding of prizes. The New York Committee, headed by James T. Daniels, M.D., have made excellent arrangements for a full day of good golf and relaxation for all golfing medics.

The Westchester Country Club located some thirty miles from Grand Central Station, can be easily reached by train or bus to Rye, or if several golfers join together by Carey Car Service or Rent-a-Car Service. Golfers wishing to have quarters closer to the Club can secure reservations at nearby hotels in Rye or Harrison, N. Y. or Greenwich, Conn.

Tournament play will start at 8:30 a.m. Players may tee-off up to 2:00 p.m. Buffet luncheon, banquet, prizes and green fees are included in the cost of the day's activities. The banquet will be served promptly at 7:00 p.m. followed by awarding of prizes. All male members of the American Medical Association are eligible to participate in the tournament. Notice of further details and advance registration card may be secured by writing Bob Elwell, 3101 Collingwood Blvd., Toledo 10, Ohio.

Players should present verification of their home club handicap, signed by their golf secretary otherwise handicap is set by the A.M.G.A. Handicap Committee.

The following New York doctors will assist Dr. Daniels: Walter Heldmann, Robert Warren, Leonard Goldman, Samuel Thompson and Frank La Grattula.

The A.M.G.A. is under the direction of the following officers: Joseph Corr, President, New York City; Paul Wyne, First Vice President, San Francisco; John Growden, Second Vice President, Kansas City, Mo.; and D. H. Houston, Seattle, Permanent Chairman of the Advisory Committee.

A.M.A. Committee Discusses Miners' Medical Care Program

Broad problems associated with the medical care of miners under the U.M.W.A. Welfare and Retirement Fund of 1948 were discussed at a two-day meeting of the A.M.A. Committee on Medical Care for Industrial Workers. This committee was established seven years ago as a joint committee of the Council on Medical Service and the Council on Industrial Health.

The meeting was held March 21-22 at Chicago's Drake hotel, under the chairmanship of Dr. William A. Sawyer, Rochester, New York.

One or more representatives from the medical societies of Pennsylvania, Colorado, and Illinois were heard. They discussed many of the controversies which have arisen over the medical care provisions of the U.M.W.A. Fund. The committee has scheduled another meeting prior to the House of Delegates session in June.

Dr. Sawyer raised some pertinent questions when he first opened the meeting, which was often enlivened by hot debate.

"Let us ask: can we have two codes of ethics—one for the U.M.W.A. and one for all other forms of medical practice? Can we condone direct payments to participating physicians in Blue Shield but not to those approved by the Fund? Can we set up panels of approved physicians for Workmen's Compensation cases while rejecting the actions of the Fund? Can we continue to mount exception upon exception in order to justify a course of action which may have little legal basis and less ethical value?

"These are questions which, in all honesty, we must try to answer if we are to fulfill the responsibilities delegated to us by the House of Delegates and if we are in full conscience to serve the medical profession as a whole in providing quality medical care to miners and their dependents."

Dr. Warren F. Draper, executive medical director of the Fund, attended the meeting. He submitted a nine-page typewritten statement which he requested the committee to have published in the *Journal* of the A.M.A. Most of the statement was a chronological record of the Fund's operation and the vari-

Ob-Gyn Applications Open

Application for certification (American Board of Obstetrics and Gynecology), new and reopened, for the 1958 Part I Examinations are now being accepted. All candidates are urged to make such application at the earliest possible date. Deadline date for receipt of applications is September 1, 1957. No applications can be accepted after that date.

Candidates for admission to the Examinations are required to submit with their application, a typewritten list of all patients admitted to the hospitals where they practice, for the year preceding their application, or the year prior to their request for reopening of their application. This information is to be attested to by the Record Librarian of the hospital or hospitals where the patients are admitted and submitted on paper 8½x11". Necessary detail to be contained in the list of admissions is outlined in the Bulletin and must be followed closely.

Current Bulletins outlining present requirements may be obtained by writing to the secretary's office.

ous medical problems associated with it. Doctor Draper stated, "As matters now stand, questions that might have been resolved through calm and judicial consideration by a body of organized medicine specifically designated for the purpose are causing widespread undesirable publicity and rifts and antagonism among various elements of the medical profession and its individual members. The present situation, if continued, will result in serious embarrassment to hospitals and bring inconvenience and hardships to hundreds of patients."

Another pertinent paragraph in Doctor Draper's statement said:

"Perhaps the most serious aspect of this experience is the demonstration that a third party payer, such as the Fund, can have no assurance that an agreement or understanding reached with responsible bodies of organized medicine will be honored. Were it possible for a thorough and impartial inquiry to be made into the reasons for the destructive actions, the facts could readily be ascertained and a basis for correction by those who were at fault would be afforded."

Two Aid-to-Medical Schools Bills Proposed in Congress

Two bills have been offered to Congress regarding federal aid to medical, dental and osteopathy schools; one sponsored by the Administration and the other a Democratic proposal.

The Administration's Proposal

Secretary Folsom recently presented to Congress the 1957 version of the Administration's bill for grants to medical, dental, osteopathy and public health schools to assist in building and equipping teaching facilities. Last year the Administration recommended \$50 million a year in such grants for five years—grants to assist in providing teaching space and equipment. Instead Congress authorized \$30 million a year for three years for grants to institutions, but with the money restricted to medical research facilities and equipment.

The Administration now proposes to add \$15 million to the research fund for the next fiscal year, for a total of \$45 million, to be used to help pay for teaching as well as research buildings and equipment. The following year the total for the combined fund would go up to \$50 million, where it would remain for the next two years.

The revised program would make use of the present 12-member National Advisory Council on Health Research Facilities to review applications. Its name would be changed to include "teaching facilities," four more members would be added, and the commissioner of education would be an ex officio member. The surgeon general of Public Health Service would continue as chairman.

Of the total \$225 million (this year and next four years) \$30 million would be earmarked for grants to dental schools, with the remaining \$195 million going to medical, public health and osteopathy schools. As under the existing law, sponsors would have to match the federal money 50-50.

In announcing the proposal, Secretary Folsom declared: "We know that the need for medical research scientists, physicians, dentists, and other skilled personnel in the health fields is increasing faster than the capacity of medical schools to train them.

The schools cannot increase training in these critical fields without increased facilities. Furthermore, many of the present medical school buildings are more than 50 years old and inadequate for the teaching of modern medicine. In all too many instances, medical and dental schools do not have the financial resources to undertake the necessary construction, rehabilitation, or expansion of their research and teaching facilities.

"A temporary grant program will assist these institutions in meeting the health needs of the Nation. Assistance for construction of teaching as well as research buildings is needed to help medical schools train more physicians and more critically needed research scientists.

The Democrats' Proposal

A bill (S. 1922) for federal aid to medical, dental and osteopathy schools for construction and equipment has been introduced by Democratic Senators Hill, Neely, Humphrey and Smathers. It differs in several respects from the administration bill. Here are some comparisons:

1. The administration bill would amend the present three-year \$30 million a year program for research construction grants by increasing it to a total of \$225 million to be used over the next four years, and for grants to help build teaching as well as research facilities. The Democrats would leave intact the present research grants program of \$30 million a year for three years, and in addition would provide \$60 million a year for five years for teaching facilities, or a total of \$390 million.

2. Under the administration bill, the U. S. contribution could not exceed 50 per cent of the research or teaching project cost. The Democrats also call for 50-50 matching, except that the U. S. would increase its share to two-thirds under two conditions, (a) if the school gives assurances that its freshman class would be increased by five per cent, and (b) in the case of new schools.

3. The administration bill would expand the present research advisory committee and make it responsible for screening teaching as well as research construction projects, whereas, the Democrats would set up a new 12-man committee, with half its members from the medical or dental professions.

Doctor Phelps Given Testimonial Banquet in Honor of National Office



Doctor Phelps graciously thanks guests for their thoughtfulness

Some 310 persons from El Reno, Canadian county and over the state gathered at El Reno's Etta Dale junior high school on the evening of April 1 in a tribute banquet to Malcom E. Phelps, M.D. The event climaxed "Malcom Phelps' Day" as proclaimed by the mayor of El Reno and was held in recognition of the national honor accorded the El Reno physician who was installed as president of the American Academy of General Practice in March.

Doctor Phelps, whose acceptance speech appears in its entirety in this issue of the *Journal*, took the oath of office in installation ceremonies conducted at the A.A.G.P annual convention held in St. Louis, Missouri. Nearly 5000 physicians attended the meeting.

Before being inducted as president, Doctor Phelps has served the Academy as vice president and chairman of the Board of Directors. He served recently on the surgeon general's advisory committee on poliomyelitis and in that capacity worked very closely with Dr. Julian Price, a member of the same committee and chairman of the A.M.A. committee on poliomyelitis. Dr. Phelps served as an A.M.A. delegate at the Seattle meeting last December, and for more than 10 years served as a member of the Council of the Oklahoma State Medical Association.

Senator Jim Rinehart presided over the banquet and H. M. McClure, M.D., Chickasha, President of the Oklahoma State Medical Association, was the main speaker. Also present were members of the Council of the Oklahoma State Medical Association and the Board of Directors of the Oklahoma Academy of General Practice, as well as several officers of other physicians' organizations.

A copper plaque from the El Reno Chamber of Commerce in praise of Dr. Phelps' accomplishments was presented by Wayman Humphrey, president of the organization.



Wayman Humphrey, president of the El Reno Chamber of Commerce, presents Doctor Phelps a copper plaque in praise of his accomplishments.

Acceptance Speech

MALCOM E. PHELPS, M.D., El Reno

The editor asked Doctor Phelps' permission to publish the address he gave March 27, 1957, at the Sheraton-Jefferson hotel, St. Louis, Missouri, in acceptance of the Presidency of the American Academy of General Practice.

As I accept the gavel emblematic of the Office of President of the A.A.G.P. I have that awesome feeling of inadequacy that comes with accepting tremendous responsibilities. I fully realize how difficult it will be to continue the pattern set by former Academy presidents. Each has made many contributions that will always exert a profound influence on every physician's life and on the practice of medicine. People in all parts of the world will benefit from their vision, their judgment, their energy and their sacrifices.

Did anyone who attended the A.M.A.'s Atlantic City meeting in June, 1947, realize that the dreams and ideals of a handful of sincere and devoted doctors would blossom and yield such an abundant harvest as has been reaped in these few short years? The most important factor in this rapid progress has been the sound judgment and sterling leadership that we have had from my esteemed and dedicated predecessors.

After reviewing and surveying their accomplishments, it is not surprising that I should have a feeling of inadequacy as I attempt to project further the pattern of progress they have set.

It would be impossible, in the time allotted me, to enumerate the many areas of progress. Important though they are, it would be a waste of time to pause and gloat over those goals we have already attained.

We cannot halt our progress or delay our forward march. Nor are we permitted the pleasures of a detour in our constant campaign to reach objectives outlined a decade ago. We must steadily march together toward our pinnacle and utopia.

The growth in these few years has been astounding. However, size alone will never make the Academy great. We can become great only if we give outstanding service in the public interest, tireless effort to promote the art and science of medicine and constant adherence to the principle of freedom and individual enterprise.

It will take the sum total of the individual contributions of all of us to determine whether or not we deserve the trust and faith of the people we serve.

Since we now have more members than any other national medical organization, with the exception of the A.M.A., there may be some tendencies on our part to overlook the importance of enlisting all doctors who do not limit themselves to a narrow specialty. Just so we will not feel too self-sufficient, we should remember that there are approximately 149,000 members of the A.M.A. The last membership directory of the A.M.A. listed about 82,000 of these as specialists. Many are actually generalists who have a part-time specialty or a field of special interest. I believe it would be fair to assume that today there are between 100 and 110 thousand potential Academy members. In other words, only about one of every five generalists in this country is an Academy member.

I do not mean to infer for even one moment that we are interested in numbers only. I firmly believe that the most progressive and most competent general practitioners are already members of our organization. I still subscribe to the theory that we want quality above quantity. However, we should do everything in our power to enroll all A.M.A. members who are not strict specialists and who conform to our ideals of competence and integrity.

Another project which we should fully support is to encourage our members to take a more active part in medical organizations,

not only on local, but on state and national levels as well.

Let me remind you that in the last house of delegates of the A.M.A., there were only 31 Academy members among the 196 delegates.

While I would never advocate that we become a "pressure block" in medical organizations, we must continue to encourage doctors who are in general practice to become interested and active in affairs that so intimately affect their practice and their privileges. If they do not take part in shaping policy, selfish and unscrupulous persons may soon further deny them the opportunity of performing many services for which they are adequately trained. We must constantly be alert to the danger and unfair and unwarranted restrictions which would fetter us and prevent our patients from receiving the full benefits which we are capable of rendering to them.

The members of the Academy want no special privileges. They only want the right to make available to their patients all the advances of modern medical science without discriminatory restrictions unrelated to professional attainment.

We will become vulnerable only if we protect and condone those who are not competent and those who do not always make the welfare of the patient paramount in their daily practice. If we are to justify our existence as the leading professional organization in the world today, we must continue to sponsor opportunities for all doctors of medicine to enrich their education, to advance their knowledge, and to promote their skills in all fields.

The Academy was founded because there was great need for an organization to establish certain academic standards for this important segment of the profession and to assure a proper integration of general practice in the matrix of American medicine.

The Academy has made an outstanding contribution to American medicine by its revitalization of the general practitioner and its insistence upon a continuing educational program for its members. However, by its very accomplishments it has assumed great responsibilities as it has taken advantage of opportunities.

We must strictly adhere to our postgraduate study requirements which should be considered as only the absolute minimum.

Our vigilance in enforcing our standards has earned us the respect of our colleagues. We must maintain this respect.

In past years some of our medical schools have tailored their undergraduate teaching program to produce specialists instead of doctors who are well trained and well qualified for the broad demands of general practice. The result has been an overproduction of those in limited specialties. This has resulted in a crowding of the specialty fields and a maldistribution of doctors. This has left many areas understaffed and some without any medical care at all.

The concentration of specialists in the more populated areas has resulted in an intense competition for patients in these areas. This competition has undoubtedly been largely responsible for *rare* specimens in our profession who have brought discredit to all of us by their tactics; such as exorbitant fees, unnecessary surgery, ghost surgery and fee splitting.

While it is not as widely publicized, some of these men, who are well trained in their narrow specialty, attempt to carry on a general practice in which they have been inadequately trained. I believe that they are just as incapable of good general practice as we would be if we attempted some of the highly technical procedures that should be done only by a true specialist in that particular field.

If our medical schools would adjust their curricula so that all their graduates were well trained generalist, capable of treating the entire patient, many problems would be solved.

A student should be permitted to learn the satisfaction that comes with treating the patient as an individual and as a human being with a soul. Many would be inspired to continue as generalists and would never be content to become a technician who treats only diseases or organs as has become such a fad in the past generation.

There are no classes in our medical school that deal with a doctor's attitude toward his patients—his feeling about illness, pain and

(Continued on Page 248)


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Acceptance Speech

(Continued from Page 248)

death—his ability to be really warm, friendly and interested in his patients or his capacity to create the feeling of sympathy toward the natural anxiety of anyone with illness or with illness in the family.

The goal of every doctor-patient relationship should be a feeling of warmth, trust and confidence in each other. It is an advantage, both for the doctor and for the patient.

The personal relationship in medical practice must be more than a slogan; for it is the expression of a deeply instinctive need and a profound desire in the hearts of all people.

The work in which we are engaged demands all our time and all our energies. Let us see to it that we do not allow ourselves to be diverted from the real objects of our pursuit to waste our time and energies in combatting senseless theories. Let us remember that the aim of the true physician is not the accumulation of wealth, or personal fame or aggrandizement, but the advancement of his science, the perfection of his art and the emancipation of mankind from the bondage of disease. The duty and responsibility is ours.

Let us remember our sacred trust with regard to our profession, to the communities in which we live and to our state and country; and rededicate ourselves to the service of humanity and thus emulate the great physician by doing good for others so that our treasures may be stored in the hearts and minds of men.

The only measure and standard by which a man can rise or fall is the standard of absolute integrity; he can deceive nobody but himself and his generation for a little space of time.

Before we can be considered really good doctors, we must have a spiritual conditioning that will prepare us for the many trials and tribulations that daily confront, not only us, but our patients.

When a doctor gets an idea that he is working alone, he has separated himself from the source and the revelation of the gift of healing, because these things that

are used for our welfare are the gifts of God. The doctor is only an instrument through which divine revelations of God's care and mercy for his people can be manifested. All of us know that science and the Almighty are wedded in the healing process. It takes the deft touch of the consecrated doctor to do God's work in the healing of broken bodies and of bewildered minds and spirits as well.

In closing may I repeat the pledge I made to you a year ago when you so graciously elected me to this highest Academy office.

"You have just conferred on me the greatest honor that can come to one in our profession. May God grant me the wisdom and the dignity to carry out the duties of this office in a manner which will reflect credit to you and this great organization.

"I shall need your advice and support in this undertaking. The stature of the able men who have preceded me sets the road that I must follow. It is with a sense of humility that I accept the honor."

"I pledge to you that I will devote all the time and talents that I may possess in attempting to discharge my duties to the American Academy of General Practice."

I thank you.

Hotel Reservations For A.M.A. Annual Meeting Should Be Made at Once

Physicians other than delegates or officers of the American Medical Association who have not yet secured hotel reservations may do so by writing directly to the A.M.A. Subcommittee on Hotels, c/o New York Convention and Visitors Bureau, 90 East 42nd St., New York 17, New York. Applications for hotel reservations should *not* be sent to the A.M.A. offices in Chicago. A complete schedule of rates may be found on advertising pages 162 and 163 of the April 20, 1957, issue of the *Journal of the AMERICAN MEDICAL ASSOCIATION*.

Defense Department Prepares Doctor Amendment to Draft Act

The Defense Department, preparing for expiration of the special doctor draft act next June 30, is moving ahead with legislation to amend the regular draft act so that physicians may be called up selectively. The bill is now before the Budget Bureau, which is expected to clear it soon for presentation to Capitol Hill.

The proposed amendment would in effect waive the Selective Service Act's prohibition against discrimination to the extent that physicians, dentists and allied scientists could be called up by their professional groups, would be subject to special calls and not necessarily inducted in the same order as others in their same age group.

One phase of the situation that is causing some concern in the medical profession is the possibility that June 30 will see the end not only of the special doctor draft act, but also the expiration of the National Advisory Committee to Selective Service (the Rusk committee) and its affiliated volunteer state and local committees. The Defense Department Amendment setting up the new doctor procurement mechanism under the regular draft has no provision for continuing the committee. Selective service had not recommended retaining the committee.

The national, state and local committees, made up of physicians and dentists, have been the liaison between the military services and Selective Service on the one hand and the medical professions and medical schools on the other.

In 1900 influenza and pneumonia took a toll of 80 persons per 100,000 population in the young adult ages (15 to 44), according to Health Information Foundation. By 1955 mortality from these causes had dropped to around 4 per 100,000 persons in the same age group.

In the past 56 years mortality from tuberculosis has declined from 199 to 8 per 100,000 population, according to Health Information Foundation. While this is remarkable progress, the Foundation notes, tuberculosis is still a great health problem, with 100,000 new cases reported in the United States in 1955.

Deaths

WALTER B. SANGER, M.D.

1912—1957

Walter B. Sanger, M.D., 45-year-old Tulsa physician, died April 11, 1957, after an unexpected heart attack.

Born in 1912 in Yukon, Oklahoma, Doctor Sanger was the son of the late S. S. Sanger, M.D., pioneer Yukon physician. He was a nephew of the late Fenton M. Sanger, M.D., and Winnie Sanger, M.D., the first woman physician in the state.

Doctor Sanger received his medical degree from the Oklahoma University School of Medicine in 1935. Before moving to Tulsa, he had practiced in Picher and Miami.

After serving in the naval medical corps during World War II, Doctor Sanger served a residency at Bon Secours Hospital, Baltimore, Maryland.

He was a member of the Methodist church in Yukon and past president of the Ottawa County Medical Society.

JOHN M. ALFORD, M.D.

1871-1957

John M. Alford, M.D., born in 1871, died in April at the age of 86.

Doctor Alford was graduated from Tulane University, New Orleans, Louisiana, in 1895. He first practiced medicine in Mississippi, moving to Oklahoma City in 1911.

Doctor Alford was on lecture duty at the Oklahoma School of Medicine from 1911 to 1938 where he held the title of Associate Professor Emeritus. He was a member of the American Medical Association, the Oklahoma State Medical Association and the Oklahoma County Medical Society.

Doctor Alford was awarded a 50 Year Pin in 1951 and was an Honorary member of the O.S.M.A.

County Medical Societies Report Officers for 1957

The following is a list of County Medical Society Officers* who took office on January 1, 1957:

Atoka-Bryan-Coal—William Arthur Hyde, M.D., Box 591, Durant; Seals L. Whitely, M.D., Box 591, Durant.

Beckham—William Leebron, M.D., Elk City; Bernard Horn, M.D., Elk City.

Blaine—A. K. Cox, M.D., Watonga; Virginia Curtin, M.D., Watonga.

Caddo—John Hine Ennis, M.D., Cyril; G. E. Haslam, M.D., Anadarko.

Canadian—Jack Enos, M.D., Yukon Clinic, Yukon; James P. Lebe, M.D., 293 S. Macomb, El Reno.

Carter-Love-Marshall—Clifford L. Lorentzen, M.D., 301 W. Broadway, Ardmore; John Adair, M.D., Bowman Bldg., Ardmore.

Cherokee-Adair—G. W. Buffington, M.D., 110 De'aware, Tahlequah; Burdge F. Green, M.D., Stilwell.

Cleveland-McClain—F. C. Buffington, M.D., 502 S. Crawford, Norman; W. T. Stone, M.D., McCurdy Clinic, Purcell.

Comanche-Cotton—Charles Green, M.D., 1202 Arlington, Lawton; John T. Hicks, M.D., 605 Gore, Lawton.

Craig-Ottawa—Edward K. Witcher, M.D., Eastern Oklahoma Hospital, Vinita; Glen W. Cosby, M.D., 231 A. N. W., Miami.

Creek—C. E. Woodard, M.D., Drumright; D. L. McAllister, M.D., Bristow.

Custer—Ralph Simon, M.D., Clinton; Paul Lingenfelter, M.D., Clinton.

East Central: Muskogee-Sequoyah-Wagoner-McIntosh—Marvil Elkins, M.D., 428 E. Side Blvd., Muskogee; William Dandridge, M.D., Barnes Building, Muskogee.

Garfield-Kingfisher—Waldo B. Newell, Jr., M.D., 230 South Fifth, Enid; Roscoe Baker, M.D., 1223 West Maine, Enid.

Garvin—John M. Moore, M.D., 415 West Guy, Pauls Valley; Hugh H. Monroe, M.D., 814 N. Walnut, Pauls Valley.

Grady—B. C. Chatham, M.D., Chickasha; J. Foertche, M.D., Chickasha.

Grant—R. W. Choice, M.D., Wakita; F. P. Robinson, M.D., Pond Creek.

Greer—Tom L. Wainright, M.D., Mangum; Fred W. Sellers, M.D., Mangum.

Hughes-Seminole—W. E. Jones, M.D., Seminole; Jack A. Wood, M.D., Seminole.

Jackson—Earl W. Mabry, M.D., Altus; Cooper D. Ray, M.D., Altus.

*The president's name follows the name of each society. The second name is the secretary-treasurer.

Jefferson—H. A. Rosier, Waurika; O. J. Hagg, M.D., Waurika.

Kay-Noble—E. C. Yearly, M.D., Medical Arts Bldg., Ponca City; Bill Simon, M.D., Perry.

Kiowa-Washita—Roy Anderson, M.D., Cordell; L. Gordon Livingston, Cordell.

LeFlore-Haskell—R. L. Winter, M.D., Poteau; K. G. Lowe, M.D., Poteau.

Lincoln—Darrell A. Seelig, M.D., Chandler; Carl H. Bailey, M.D., Stroud.

Logan—James S. Petty, M.D., 123 W. Broadway, Guthrie; J. R. Henke, M.D., 112 S. Wentz, Guthrie.

Northwestern: Beaver-Dewey-Ellis-Harper and Woodward—Walter H. Dersch, M.D., Shattuck; M. C. England, M.D., Woodward.

Murray—W. D. DeLay, M.D., Sulphur; Will G. Crandall, M.D., Sulphur.

Okfuskee—Andy S. Melton, M.D., Okemah; Everett L. Wiggins, M.D., Weleetka.

Oklahoma—Meredith M. Appleton, M.D., 610 NW 9 St., Oklahoma City; C. W. McClure, M.D., 415 NW 11, Oklahoma City.

Okmulgee—G. A. Kilpatrick, M.D., Henryetta; Cleve Beller, M.D., Okmulgee.

Osage—Richard M. Loy, Pawhuska; Rex W. Daugherey, M.D., Pawhuska.

Payne-Pawnee—J. Douglas Green, M.D., 1030 E. Cherry, Cushing; George R. Smith, M.D., 1030 E. Cherry, Cushing.

Pittsburg—S. L. Norman, M.D., McAlester Clinic, McAlester; H. C. Wheeler, M.D., McAlester Clinic, McAlester.

Pontotoc—D. C. Ramsay, M.D., 100 E. 13, Ada; James Hohl, M.D., 100 E. 13, Ada.

Pottawatomie—J. D. Kethley, M.D., 624 N. Broadway, Shawnee; Clinton Gallaher, Box 949, Shawnee.

Rogers-Mayes—W. A. Howard, M.D., Chelsea; O. U. Holt, M.D., Claremore.

Stephens—Casper H. Smith, M.D., 815½ Walnut Ave., Duncan; Robert Taylor, M.D., 1109 Walnut, Duncan.

Texas-Cimarron—J. E. Morgan, M.D., Secretary.

Tillman—C. C. Allen, M.D., Frederick; F. Polk Fry, Jr., Frederick.

Tulsa—G. R. Russell, M.D., 604 S. Cincinnati, Tulsa; Walter E. Brown, M.D., 2020 S. Xanthus, Tulsa.

Washington-Nowata—Fred Wallingford, M.D., 500 E. Frank Phillips, Bartlesville; John E. Scott, M.D., Medical Center, Bartlesville.

Woods-Alfalfa—Ed. L. Calhoon, M.D., Beaver; Kenneth L. Peacher, M.D., Waynoka.

Choctaw-Pushmataha—Henry D. Wolfe, M.D., Hugo; John D. Jennings, M.D., Hugo.

McCurtain—Not reported.

1956 Report of Woman's Auxiliary To O.S.M.A. House of Delegates

Mrs. E. Clyde Mohler, President

The Woman's Auxiliary to the Oklahoma State Medical Association has completed its 38th year of active organization. The aims and purposes of this auxiliary are to extend the aims of the medical profession to all organizations which look to the advancement of health and health education. Another of our most important purposes is to cultivate friendly relations and promote mutual understanding among physicians' families. The first aim comes rather naturally, for all doctors' wives are called upon to serve in their communities in all kinds of health projects. The second purpose is not always accomplished so easily and it is here that the Auxiliary serves a real need to the Medical Association by promoting good will among doctors and their families. The Auxiliary also endeavors to participate in any project requested of us by the Oklahoma State Medical Association.

Our membership has grown from 19 in 1907 to 1,961 in 1956. This year shows a gain of 124 new members. We have 21 active auxiliaries with 45 counties represented. Our gain in membership over last year is 44 members. This figure should be much higher but for the loss of two auxiliaries. I feel that both of these groups would not have disbanded if they had had encouragement from the respective medical societies as well as the individual doctor husbands. I hope that each delegate here will become aware of the potentials of auxiliary work and will go home to encourage first, your own wife and secondly, your county auxiliary to continue in their endeavors.

This year's accomplishments have been good in the field of organization. One new auxiliary was organized in Okmulgee County and we are most proud to have organized the "first in the nation" Auxiliary to the Student American Medical Association. This enthusiastic group is made up of 110 wives of students. In spite of small babies and many jobs, the average attendance of this group is 85. This year's program, under the sponsorship of Oklahoma County Auxiliary, was an orientation program with representatives from all levels of organized medicine and auxiliary

giving most informative talks. This is the starting point for good public relations for future medicine in Oklahoma.

In November, at the request of the Medical Association, the Auxiliary set up an exhibit at the Rural Health Conference. Copies of *Today's Health* magazine were distributed to those attending. The Auxiliary has a quota to meet each year based on one subscription per member. As yet, we have sold under 95%, but we hope to be over 100% subscribed before the National Convention. This excellent magazine is the only authentic health magazine published by the American Medical Association for the laity. For the small price of \$1.50 you can't afford to miss this opportunity for public relations as well as health education in your reception room. Patients really like the magazine . . . please do turn in your subscription through your local auxiliary for we are serving as your salesmen in this project.

Auxiliary members are interested and acutely aware of medical legislation. Many members read the weekly Washington A.M.A. letters and legislative reports are given at the monthly meetings. The President and President-Elect were invited to attend the Regional Legislative meeting of the A.M.A. in Dallas in November and found it most informative and inspiring. Letters were sent to each auxiliary asking for study sessions to be held on the Social Security Amendments, in particular the HR Bill 7225.

The auxiliaries have contributed a total to date of \$687.00 to the American Medical Education Foundation.

Nurse recruitment is our most outstanding state project. We sponsor, in cooperation with the Oklahoma State Nurses Association, the Future Nurses Clubs in high schools. The Auxiliary initiated 35 of these clubs and serves as sponsors. There are approximately 700 girls who are members of these clubs over the state and 18 of the senior girls are entering nurses training this fall. Next spring, the first State Future Nurses Field Day will be held in Oklahoma City. After a morning meeting where program and project ideas will be exchanged, field trips through the Medical Research Foundation and University Hospital are planned. Through these clubs many girls are becoming

(Continued on Page 255)

COMING MEETINGS

Post Graduate Symposium on the

BASIC SCIENCES RELATED TO ANESTHESIOLOGY

JUNE 10-14, 1957

Hotel Webster Hall Pittsburgh, Pennsylvania

University of Pittsburgh School of Medicine Department will present the symposium in co-operation with the Department of Anesthesiology of the St. Francis, Allegheny General, Mercy, Medical Center Hospitals.

Registration Fee—\$25.00

The course will be limited to 50 participants. Full particulars should be obtained from Chairman of the Committee on Graduate Medical Education, University of Pittsburgh School of Medicine, 3941 O'Hara Street, Pittsburgh 13, Pennsylvania.

UNIVERSITY OF OKLAHOMA SCHOOL OF MEDICINE

POSTGRADUATE COURSES—1956-1957 SHORT COURSE SERIES

3:30 to 8:30 p.m., Room 118, Medical School Afternoon and Evening Sessions

May 15—Chronic Pulmonary Disease

June 1—Surgical Emergencies

SELECTED PROBLEMS IN INTERNAL MEDICINE

November 26-30—Arranged by the American College of Physicians

May 31—Two Guest Lecturers and presentation of original papers by members of the various House Staffs will highlight this program.

POSTGRADUATE COURSE ON GASTROENTEROLOGY

May 13-15, 1957

University of Colorado School of Medicine
Denver, Colorado

Sponsored by the American Gastroenterological Association

May 13—Dinner Meeting with speaker Doctor Herman Taylor of London, England, speaking on the subject: *"The Present Status of Medicine in England."*

11th Annual Rocky Mountain CANCER CONFERENCE

**July 10 and 11, 1957
Denver, Colorado**

SYMPOSIA ON THE STOMACH AND LUNG

Formal papers by Arthur T. Hertig, M.D., Richard H. Overhold, M.D., Alton A. Ochsner, M.D., and Joseph Bank, M.D.

SYMPOSIA ON CYTOLOGY

By Seymour Farber, M.D., Joseph A. Cunningham, M.D., and Arthur T. Hertig, M.D.

GUEST SPEAKERS:

Joseph Bark, M.D., Internist, Phoenix, Arizona
Seymour Farber, M.D., Internist, San Francisco
Arthur T. Hertig, M.D., Ob-Gyn Pathologist, Boston
Joseph A. Cunningham, M.D., Pathologist, Birmingham, Alabama

L. Henry Garland, M.D., Radiologist, San Francisco
Alton A. Ochsner, M.D., Surgeon, New Orleans
Richard H. Overholt, M.D., Surgeon, Boston

Annual Meeting of the OKLAHOMA STATE HEART ASSOCIATION

June 15, 1957

801 N.E. 13th Oklahoma City, Okla.

Dr. Michael E. DeBakey, Professor and Head of the Department of Surgery at the Baylor University College of Medicine, Houston, Texas, will be the principal speaker for the Scientific Session. Doctor DeBakey will direct his attention to discussion and graphic films illustrating the "Changing Concepts in Aortic and Arterial Surgery."

The afternoon session has been planned to provide a resume and review of all the services available in the community and to the physician to "Stop Rheumatic Fever," the goal of the Association this year.

Second Annual OZARK EMPIRE CANCER CONFERENCE

May 24, 1957

Springfield, Missouri

DISCUSSION OF CANCER PROBLEMS
3:00 p.m. to 10:00 p.m.

Physicians from surrounding states will have the opportunity to discuss cancer problems with the following distinguished faculty members of the Washington University School of Medicine: Dr. Lauren V. Ackerman, Professor of Surgical Pathology; Dr. Eugene M. Bricker, Associate Professor of Clinical Surgery; Dr. William M. Allen, Professor of Obstetrics and Gynecology; Dr. Wendell G. Scott, Professor of Clinical Radiology.

There will be no registration fee other than the cost of the dinner. Physicians may get complete details by writing: Mr. D. L. Galbraith, 306 Professional Bldg., Springfield, Missouri.

Third Annual Meeting Oklahoma Association of House Staff Physicians

Friday, May 31, 1957

MORNING SESSION

Presiding: WALTER COIN, M.D.

- 8:45 a.m. WELCOME—*Walter Cox, M.D.*, Chairman, Oklahoma Medical Center, Oklahoma City, Oklahoma
- 9:00 a.m. Gastric Carcinoma Occurring in a Gastrostoma—*James A. Webb, M.D.*, Oklahoma Medical Center, Oklahoma City, Oklahoma
- 9:15 a.m. Observations on Chickenpox and Leukemia in Children—*Maurice E. Dyer, M.D.*, Oklahoma Medical Center, Oklahoma City, Oklahoma
- 9:30 a.m. The Role of Edema in the Development and Treatment of Congestive Failure—*Donald W. Seldin, M.D.*, Dallas, Texas
- 10:15 a.m. Postmenopausal Uterine Bleeding of Undetermined Etiology—*William E. Hood, Jr., M.D.*, St. Anthony Hospital, Oklahoma City, Oklahoma
- 10:30 a.m. Intermission—Coffee

Presiding: ROBERT JABOUR, M.D.

- 10:15 a.m. A Preliminary Report of Tests for Urinary Prophobilinogen on 4400 Patients in Search for False Positives—*Elwood Herndon, M.D.*, Wesley Hospital, Oklahoma City, Okla.
- 11:00 a.m. An Epidemic of Breast Abscesses—*Robert W. Dean, M.D.*, St. John's Hospital, Tulsa, Oklahoma
- 11:15 a.m. Leukemoid Blood Reactions—*William F. Denny, M.D.*, Oklahoma Medical Center, Oklahoma City, Oklahoma
- 11:30 a.m. The Management of Diffuse Fecal Peritonitis—*Jim H. Calhoon, M.D.*, Hillcrest Medical Center, Tulsa, Oklahoma
- 11:45 a.m. A Comparative Study of Two Preparations of Digitalis—*T. J. Lowery, M.D.*, Oklahoma Medical Center, Oklahoma City, Okla.
- 12:00 a.m. Red Cell Life Span and Iron Turnover in Patients with Hypoxia due to Pulmonary Emphysema—*Walter Whitcomb, M.D.*, and *James R. Lowell, M.D.*, Oklahoma Medical Center, Oklahoma City, Oklahoma

AFTERNOON SESSION

Presiding: EARL BRICKER, M.D.

- 1:30 p.m. Splenectomy for Congenital Hemolytic Anemia—*Robert Jabour, M.D.*, Hillcrest Medical Center, Tulsa, Oklahoma
- 1:45 p.m. A Practical Approach to Differential Evaluation of Renal Function in Hypertension—*W. A. Friedman, M.D.*, Oklahoma Medical Center, Oklahoma City, Oklahoma
- 2:00 p.m. Anemia of Pregnancy—*C. A. Hunter, M.D.*, Kansas City, Kansas
- 2:45 p.m. Excision of Internal Carotid Aneurysm Employing Hypothermia and Vascular Shunt—*Karl K. Boatman, M.D.*, Oklahoma Medical Center, Oklahoma City, Oklahoma
- 3:00 p.m. Chlorpromazine Masking Intestinal Obstruction—*Duane A. Barnett, M.D.*, Oklahoma Medical Center, Oklahoma City, Oklahoma
- 3:15 p.m. Intermission—Coffee

Presiding: CARTER MOODY, M.D.

- 3:30 p.m. Serum Cholesterol, Diet and Stress in Patients with Coronary Artery Disease—*Charles W. Cathey, M.D.*, Oklahoma Medical Center, Oklahoma City, Oklahoma
- 3:45 p.m. Observations on the Use of Postmortem Homografts in the Treatment of Third Degree Burns—*Charles T. Morgan, M.D.*, Hillcrest Medical Center, Tulsa, Oklahoma
- 4:00 p.m. The Functioning Carcinoid Syndrome—*William R. McCabe, M.D.*, Oklahoma Medical Center, Oklahoma City, Oklahoma
- 4:15 p.m. Parietal Pleural Needle Biopsy—*Jack D. Welsh, M.D.*, Oklahoma Medical Center, Oklahoma City, Oklahoma
- 4:30 p.m. Presentation of a Case of Hyperthyroidism in Childhood—*Bill R. Goetzing, M.D.*, Hillcrest Medical Center, Tulsa, Oklahoma
- 4:45 p.m. Studies of Postpartum Pituitary Necrosis—*Carl Smith, M.D.*, Oklahoma Medical Center, Oklahoma City, Oklahoma
- 5:00 p.m. Macroglobulinemia of Waldenstrom—*James D. Hampton, M.D.*, Oklahoma Medical Center, Oklahoma City, Oklahoma
- 5:15 p.m. Determination of Genetic Sex by Oral Mucosal Smears and Blood Films—*J. B. Verhagen, M.D.*, Oklahoma Medical Center, Oklahoma City, Oklahoma

25 Years Ago . .



Articles published in *The Journal* of the Oklahoma State Medical Association May 1932. Edited by John G. Matt, M.D.

Editorial—Then and Now

"Called upon recently to write a paper for the Muskogee County Medical Society, the editor (Dr. Claude A. Thompson, Muskogee) believes that some of the information culled from old records will be of interest to Oklahoma physicians. It is as follows:

"Minutes, Muskogee, Indian Territory, April 18, 1881. At 2 P.M., a number of medical gentlemen met pursuant to a previously circulated call for a mass convention for the purpose of medical organization. The convention was called to order by Dr. B. F. Fortner, who named Dr. G. W. Cummings to the chairmanship of the convention, which was unanimously confirmed. The organization was completed by the election of Dr. Cutler, vice-president, and Drs. Fortner and C. Harris as secretaries. The chair proceeded to state the object of the meeting by reading the original call and address appended. The chair proceeded to appoint a committee on Constitution and By-Laws, consisting of Drs. B. F. Fortner and Felix McNair."

"The notes of the following meeting are very brief or entirely absent. A Constitution was adopted and the dues were fixed at \$1.50 annually. Among these organizers, not one is living today, and so far as I am able to say the minutes of October 10, 1889, show only five physicians living. Among those are: Drs. R. L. Fite, Tahlequah; F. B. Fite, Muskogee; Oliver Bagby, Vinita; George A. McBride, of Texas.

"The Oklahoma Territorial Association was organized in a similar manner May 9, 1893, at Oklahoma City. It is significant that the committee on the Constitution and By-Laws 'Recognized the adoption of the Constitution and By-Laws of the Indian Territory Medical Association with the following changes in the Constitution, namely: Dues \$1.00—censors, three.'

"When it became inevitable that both Oklahoma and Indian Territory would likely become one state, overtures were made from each society to the other and an agreement for amalgamation or merging was entered into in 1907. The writer was present at the meeting at Oklahoma City as one of the representatives from Indian Territory. So far as is known only three of that committee are living: Doctors G. A. Wall, Tulsa; E. O. Barker, Guthrie; and the writer. . . ."

Editorial Notes—Personal and General

Doctor Pat Fite, Muskogee, attended the meeting of the Southern Society of Clinical Surgeons held at Rochester in April.

Dr. W. C. Vernon, Okmulgee, has returned from Vienna, after several months' stay, where he took a post-graduate course in surgery.

Garfield County Medical Society had its annual guest day March 31st, with the arrangements in the hands of the officers of the County Society. The speakers included Dr. H. Winnett Orr, Lincoln, Nebraska, who presented a paper on "Osteomyelitis;" Dr. Willard Bartlett, Jr., St. Louis, who gave a paper on "Coronary Occlusion, With Special Reference to Blood Supply." Among other entertaining features was a banquet, followed by motion pictures.

CLASSIFIED ADS

OFFICE SPACE for lease. Ten rooms, two lavatories, private parking, air conditioned, ground floor. Will rent half or lease all. 1225 North Walker or call FOrest 5-4842 or TR 8-3311.

FOR SALE: Complete office equipment and furniture, including x-ray and bucky (2 yr. old) for General Practitioner. May be bought on easy terms. Excellent opportunity for practice in town of 4,500. Long term lease on desirable office space available at low rent. If interested write for complete invoice of equipment, and details of opening for practice. R. O. Smith, M.D., 306 N. Willow, Fayetteville, Arkansas.

FOR SALE: Physician's instruments and office equipment. Mrs. Melvin Fry, 2007 S.W. 15, Oklahoma City, Okla. Phone CEntral 2-9284.

FOR RENT: Office space with dentist and pediatrician. 2548 N.W. 23, Oklahoma City. Telephone WI 2-5969.

WILL BUILD TO SUIT PHYSICIAN. Plan your own office in building to be shared with Oklahoma City dentist. Choice location, 827 N.W. 10th. For details call CE 2-0000.

GENERAL PRACTICE OPPORTUNITY: Stuart, Oklahoma; to serve trade area of 1,500; partially equipped office available; good church town, new school; contact Robert Lee Nunn, Postmaster.

WANTED—Associate for active General Practice in Oklahoma City area. Guarantee plus percentage and partnership after first year if mutually satisfactory. Give full details in first letter. Write Box A, c/o Oklahoma State Medical Association, Box 9696, Shartel Station, Oklahoma City, Oklahoma.

Report of Woman's Auxiliary

(Continued from Page 251)

interested in nursing as a career. We follow through the recruitment program with a Nurse Loan Fund whereby a girl may borrow the tuition for the first year enrollment of \$125.00 and is eligible for a \$50.00 loan the second and third year of her training. The sole support of this fund is through county contributions; last year we were faced with the need of more money. We made an appeal to the individual doctors and some 80 doctors responded. We are most appreciative of the \$796.00 received. We were able to grant seven first-year loans and three second-year loans with a disbursement of \$1750.82. I might add that since the applications are increasing each year we would always accept and greatly appreciate any contributions from the physicians.

Although our budget is small and the publishing of a newspaper is a big expense, we think it most important to have this form of liaison between the county and state auxiliaries. We have a six page newspaper named *The Sooner Physician's Wife* which is printed four to six times a year depending upon news and budget. This paper is sent to each active member.

The auxiliaries also promote Civil Defense and Mental Health work. Some of the auxiliaries have done outstanding work in Civil Defense planning this year.

Every auxiliary in the state observed Doctor's Day in some manner. We hope the doctors enjoy this day set aside to honor and entertain our professional husbands on March 30th. Much good fellowship results from the parties held in your honor. We *know* the medical profession is "pretty special" and as wives we enjoy recognizing that fact.

For the Woman's Auxiliary to the Oklahoma State Medical Association, I would like to express our deepest appreciation for the cooperation of the Medical Association, its president, Doctor R. Q. Goodwin, Mr. Dick Graham and Mr. Don Blair and the office staff. We are most grateful for the inclusion of an auxiliary office in the new Medical building and are eagerly anticipating having our own office.

(Through an error in filing, the publication of this report has been delayed. Editor.)

**EVERY WOMAN
WHO SUFFERS
IN THE
MENOPAUSE
DESERVES
"PREMARIN"**

*widely used
natural, oral
estrogen*

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PHYSICIAN PLACEMENT

Anesthesia

Daniel B. Perry, Residence Quarters, Harlem Hospital, New York, N. Y., age 48, Meharry Medical College, 1948, interned at Harlem Hospital, New York and served residency in anesthesia there, veteran, available December, 1957.

General Practice

Louis Marshall Cuvillier, Jr., 1407 Woodside Parkway, Silver Spring, Maryland, age 44, married, George Washington University School of Medicine, 1938, interned at Garfield Memorial Hospital, Washington, D.C., one year residency in medicine and obstetrics at Norfolk General Hospital, Norfolk, Virginia. Veteran, available upon 90 day notice.

Orby L. Butcher, Jr., 3106 Alaska, Dallas, Texas, age 29, married, University of Oklahoma, 1955, now in surgical residency at VA Hospital in Dallas, Veteran. Available, July, 1957.

David L. Mossman, USAH, Orthopedic Department, Ft. Riley, Kansas, age 28, married, University of Vermont, 1954, available upon separation from service, December, 1957.

Robert R. Rupp, 1235 N. Lorraine, Wichita, Kansas, age 30, married, University of Oklahoma, 1956, internship at Wesley Hospital, Wichita, veteran, available, July 1, 1957.

Internal Medicine

James E. Morris, Jr., 1034 Second St., S.E., Moultrie, Georgia, age 26, married, University of Tennessee College of Medicine, 1953, one year internal medicine residency, now serving military obligation, available February, 1957.

Robert W. Datesman, 94 Oak Street, Westwood, Massachusetts, age 30, married, University of Pennsylvania, 1951, residency training at University of Minnesota Hospitals, and Boston Veteran Hospital, Veteran, available in July, 1957.

Joseph A. Ezzo, 3215 Nebraska, St. Louis 18, Missouri, age 32, married, St. Louis University, residency at St. Louis City Hospital and St. Louis University Hospitals, veteran, available, July 1, 1957.

Obstetrics-Gynecology

John P. Harrod, Jr., 932 E. 56th Street, Chicago 37, Illinois, age 33, married, University of Georgia, 1946, served residency at University Hospital, Augusta, Ga., Duval County Hospital, Jacksonville, Florida and at Chicago Lyons-In Hospital, Board certified, veteran, availability date unknown.

Bernard Martin Davis, Jr., 101 Turnbridge Rd., Baltimore 12, Maryland, age 31, married, Georgetown University, 1951, 3 years residency at University Hospital, Baltimore, veteran, available, July 1, 1957.

Pathology

Jess D. Green, Jr., 1765 South Victor, Tulsa, age 32, married, George Washington University, 1950, will finish four years pathology residency in January, 1957.

Pediatrics

Robert W. Mosely, 211 Adams Street, Galax, Virginia, age 32, married, Medical College of Virginia, 1948,

residency at Walter Reed Army Hospital, Board eligible, interested in private practice or public health, veteran, available April, 1957.

Surgery

Duane A. Barnett, 1636 N.E. 46th Street, Oklahoma City, age 30, married, University of Oklahoma, 1952, interned at Wesley Hospital, Oklahoma City, now in residency at Veteran's Administration Hospital, veteran, will be board eligible and available for practice July 1, 1957.

Aristides Cardona, 106 Sinis Rd., Syracuse, New York, age 30, married, State University of New York, 1951, Board eligible, wants additional residency, veteran, available, June, 1957.

Vernon L. Guynn, 2026 S. Second Ave., Maywood, Ill., age 32, married, University of Illinois, 1947, passed Part I of General Surgery Board, military obligation served, available January 1, 1957.

Alvin S. Natanson, 49 Kiernan Drive, Rantoul, Illinois, age 36, married, Tufts Medical College, 1949, residency training at Boston City Hospital, Diplomate of the American Board of Surgery, available upon separation from service, July, 1957.

James Firth Alexander, Charity Hospital, New Orleans, Louisiana, age 34, single, Ohio State, 1949, in orthopedic residency training now, veteran, available immediately.

Karl Edwin Blake, 2681 Crosby Avenue, Pittsburgh 16, Pa., age 33, married, University of Pittsburgh, 1948, residency at VA Hospital and Children's Hospital, Pittsburgh, Board Eligible, veteran, available May, 1957.

Urology

John C. Brazos, 406 South Washington, Watertown, Wisconsin, age 36, married, University of Illinois, 1949, interned at Anckee County Hospital, St. Paul, Minnesota, residency at Milwaukee County Hospital, Milwaukee, Wisconsin. Veteran, available upon completion of residency, July 31, 1957.

Paul Lucian Livingston, 18340 Lake Chabot Road, Castro Valley, California, age 35, married, New York Medical College, 1946, served residencies at Orange Memorial Hospital, New Jersey and at Veterans' Administration Hospital, Long Beach, California, now Assistant Chief Urologist at V.A. Hospital, Board Qualified, veteran, available upon sixty days notice.

CALIFORNIA CAREER OPPORTUNITIES FOR PHYSICIANS AND PSYCHIATRISTS

Employment available as a result of interview only.

Assignments in State hospitals, juvenile and adult correctional facilities, or a veterans home. Three salary groups: \$10,260-12,000; \$11,400-12,600; \$12,600-13,800. Salary increases being considered effective July 1957. Citizenship, possession of, or eligibility for California license required.

Write:

MEDICAL RECRUITMENT UNIT, BOX A
State Personnel Board
801 Capital Avenue
Sacramento 14, California

Editorials

Arrows To Atoms

The catchy title for our Exposition brings to mind immediately our technologic development. What about our development in medicine in Oklahoma?

Virgil Andrew Wood, M.D.,¹ on a big white horse, made the run April 22, 1889, and settled first in Oklahoma City. The following are excerpts taken from letters that he wrote back to the Editor of the *Visitor* published in Wallaceburg (now Blevins), Arkansas, in April, May and June, 1889.

Pottawatomie Nation, April 21, 1889.

"... on to-morrow every man expects to run for his life. He tells but few of his intentions as to course or locality, and those few don't believe him. Men who served as valiant soldiers for four years say they never saw such excitement and enthusiasm. I know of six doctors in these camps and not a single preacher."

Oklahoma City, April 22, 1889. 6 o'clock p.m.

"The great race is over . . . We are now in the city of Oklahoma . . . They are laying off the city."

Oklahoma City, April 26, 1889.

"... Doctors are thick here as some people claim the fiddlers are in the regions of Pluto . . ."

Oklahoma City, April 27, 1889.

"... We have read of a nation being born in a day, and recently it has been my lot to witness the birth of a city in half a day . . ."

Oklahoma City, May 16, 1889.

"... It is claimed that there are three thousand people here and about fifty physicians. The doctor who gets no more than his pro rata of practice has about 60 men to his share. Perhaps one in sixty is now sick with slight diarrhea. As I have a genial, educated, and popular partner, and a conspicuous location, we are getting more than our share of the practice."

Oklahoma City, June 1, 1889.

"... One day this week two children were buried here. They died of dysentery . . . One

day this week a little Indian, perhaps ten years of age, amused himself as well as the whites, by shooting arrows at nickles. Every nickle he hit was his, and he hit about two out of three . . ."

Oklahoma City, June 6, 1889.

"... Health is not so distressingly good as it has been, but yet there are two doctors to one patient . . . Yesterday an Arkansas man brought in a nice tumor on his neck. We robbed him not only of the tumor, but of a few of his surplus dollars. . . ."

Sixty-eight years, less than a life time of many, have passed. Were he alive to continue his letters, one now might read as follows:

Oklahoma City, May 20, 1957.

The city is now a sprawling mid-western metropolis, the capital of a young, progressive state. Speaking of things medical—many of the once destructive diseases are no longer great problems to us. Typhoid, malaria, bacillary dysentery, whooping cough and diphtheria are kept pretty well under control with the help of immunizing procedures and alert Public Health Departments. The medical profession here, as in other parts of the country, has developed a social consciousness that has led it to spearhead a drive to immunize all people of all ages against paralytic polio, a disease which has been a constant summer terror of the nation for the last thirty years.

We believe the vaccine will be effective. The vaccine bears the name of Jonas Salk who, at the top of the pyramid, made available an effective and safe one. The base of the pyramid is made up of many, many workers in the field of virology and immunology over many many years and monies contributed by many philanthropic funds and by big and little people in all walks of life—all interested in the health of the nation. The practicing medical profession is lucky in the great support it has everywhere. In this atomic age we are no longer just pill peddlers and leachers but appliers of information, techniques and procedures that have been worked out and proven in our great medical centers to the people in our locality who need them.

1. Chronicles of Oklahoma 34:302 (Autumn) 1956 by permission of the Editor.

Changing Concepts in the Use of Potent Narcotic Analgesic Drugs

Potent analgesic substances such as morphine are more efficiently utilized today than several years ago because of a better understanding of the actions of this and similar drugs and also because of the introduction of new non-narcotic drugs generally referred to as tranquilizers. Perhaps a discussion in terms of the management of the post-operative surgical patient will best serve to elucidate these changing concepts.

By far the outstanding indication for potent narcotics is for the relief of intense pain. Most of the narcotic drugs have other systemic effects which are undesirable, particularly in the post-operative patient. In addition to respiratory and circulatory depression, we frequently see such manifestations as nausea, vomiting, dizziness, distention, "gas" pains, constipation, urinary retention, dysphoria, lethargy and a disinclination to mobilize. None of these features are beneficial or comforting to the surgical patient.

It has been established that most average adult patients receive the maximum of analgesia with 10 mgs (gr 1/6) of morphine. The incidence of undesirable side effects increases sharply with higher doses, far out of proportion to increased degree of pain relief. A recent revelation concerning morphine in particular is the fact that most people (about 90 per cent) experience dysphoria rather than euphoria from morphine; thus most patients feel "terrible" when taking such drugs. The majority of post-surgical patients suffer more from restless-

ness and discomfort rather than pain after the first 48 hours, therefore, the use of tranquilizers and less potent analgesics seem more appropriate beyond this time interval.

It becomes apparent then, that the post-operative patient can be more effectively and physiologically relieved of pain and discomfort by the careful application of both types of drugs; i.e. narcotics in lesser dosage combined with a tranquilizer. Because some tranquilizing drugs induce circulatory instability; hypotension, etc., (Thorazine and Sparine) and others do not (Phenergan), the latter, Phenergan, is perhaps more appropriate in post-operative patients and those who might have circulatory instability as well as pain.

Because tranquilizer drugs, when administered simultaneously or concurrently with narcotics, have synergistic effect, it is important to reduce the narcotic dosage by 1/2 or 1/3 of what would be usual dosage. For example where morphine gr. 1/6 (10 mgs) would ordinarily be appropriate, morphine gr. 1/8 (8 mgs) combined with 25 to 50 mgs. of Phenergan would produce excellent analgesia and a state of calmness.

The net result is a more comfortable patient who is less apt to suffer from the many undesirable side effects of larger narcotic doses; thus a smoother and easier post operative convalescence. These same advantages are now being utilized to an increasing extent in pre-anesthetic medication and for obstetrical patients in labor.—H.A.B.

Phenergan—proper name for promethizine
Sparine—proper name for promogine
Thorazine—proper name for chlorpromazine

Doctors As Diplomats

American doctors around the world will be the theme of a full-hour color "March of Medicine" television film to be presented this fall by Smith, Kline & French Laboratories with the cooperation of the American Medical Association. The program will be built around the activities of American doctors throughout the world who, in their devotion to their profession, are good-will ambassadors for the United States. Private, missionary, military, foundation and govern-

ment doctors will be featured. The production crew will journey to a number of far-flung locations, including Japan, Korea, Hong-Kong, Nepal, India, Sarawak, Indonesia, Iran, Turkey, Ethiopia, France and Guatemala. This "March of Medicine" program will be beamed over the NBC television network, Tuesday, December 3, during A.M.A.'s Clinical Session in Philadelphia.

Scientific Articles

A Five Year Study--

HYPERTENSION

Treated with Rauwolfia

J. WILLIAM FINCH, M.D., F.A.C.P.

A number of studies of Rauwolfia Serpentina and some of its alkaloids have demonstrated their therapeutic value in hypertension.¹ Most authorities agree that Rauwolfia is principally valuable in mild or labile hypertension. Though previous reports indicate little or no response in severe cases, the results of this study suggest that such failure was due to an inadequate period of treatment rather than to an inherent limitation in the efficacy of Rauwolfia.

It has been shown that, although subjective improvement and bradycardia are noted early in treatment, the hypotensive effect of the drug is manifested slowly, after long term administration.² Thus, short-term therapy, except perhaps for transient subjective improvement, may be totally without value to the patient who could benefit from an adequate period of treatment.

In the present study, treatment of patients with chronic hypertension extended over much longer periods of time than in previously reported studies. Particular attention was paid to the flicker fusion threshold (FFT) as one of the criteria of progress. Evidence of the correlation between the FFT and the clinical status in hypertension is presented elsewhere.³ Overall results, with sufficiently long treatment periods, have been remarkable satisfactory.

Thus far, 87 patients with chronic hypertension have been treated with Rauwolfia serpentina alkaloidal extracts and their progress followed for over five years.

Earlier Study—In 1950, study was begun to determine the effect of a veratrum viride preparation (Veraloid) on the flicker fusion threshold in chronic hypertensives. "Vera-

THE AUTHOR

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loid" had been observed to exert a glyceryl trinitrate-like action on the FFT of the normal as well as the hypertensive subject. It was hoped that administration of this drug to patients with chronic hypertension would eventually produce permanent lowering of the blood pressure and return of the FFT to normal. Although treatment continued uninterrupted for many months, with continuous good effects noted during administration, the blood pressure and the FFT of all patients with chronic hypertension reverted to pretreatment levels within hours or days after cessation of treatment.

Present Study—In 1952, when Rauwolfia serpentina became available for experimental study, 49 of the patients from the earlier "Veraloid" series, who has been carefully observed for two or more years, were started on Rauwolfia therapy, and 38 new cases were added to the group. The majority of these 87 patients were initially given the crude whole root (Riker 1043). A daily dose of 500 mg. was used until definite results were obtained; the amount was then reduced to 200 or 250 mg. daily. As pharmaceutical advances resulted in refinement of the original crude root, alseroxylon ("Rauwiloid"),

was substituted in some of the cases and reserpine in others. Alseroxyton differs from crude root preparations in that it represents the total hypotensive activity of the whole root, but is free from inert material and the alkaloids of the yohimbine type. It contains, besides reserpine (trimethoxy benzoic acid ester of methyl reserpate), other active and desirable alkaloids, among these rescinnamine (trimethoxy cinnamic acid ester of methyl reserpate).⁴ Rescinnamine appears to have greater hypotensive and less sedative properties than reserpine⁵ and is probably responsible, in part for the superiority of alseroxyton over reserpine alone.

None of the *Rauwolfia* alkaloidal extracts produces quick results. Definite effects may not become apparent for several days or weeks after treatment is begun. These effects remain for one to three weeks after treatment with the drug has been discontinued. It is therefore difficult to demonstrate, in the same patient, differences in potency between one extract and another, unless a sufficiently long period without any treatment is allowed to intervene.

There was no attempt to select cases for study. All cases of hypertension presenting themselves for treatment were included in the series. Blood pressure recordings were made weekly for the first three or four weeks of treatment, twice monthly for four to six more visits and then monthly. The vast majority of the entire group are patients who have been under the author's medical care for from five to twenty years, none for less than five years. The possible psychosomatic effect of a new drug was thus kept at a minimum as these patients had been under observation by the same medical personnel for dozens of previous visits. With a long established patient-doctor relationship such as exists with the small town physician, patients and their families and problems are known intimately and the effect of a new medication is more easily observed and evaluated than in the ultra-scientific study where patients and the medical team and environment are strangers.

Upon entering the office, where all observations were made, each patient was placed in the same suite of offices where he

or she had been many times before and was allowed to relax in a comfortable chair for five or ten minutes. Then the blood pressure recording was made by the same nurse who had seen the patient many times previously and in most instances the pressure was again recorded by the physician later on in the interview. All FFT recordings were made by the same nurse in the same room with the identical lighting of previous visits.

In the group reported, no subsidiary treatment other than general good nutrition and insistence on holding the body weight to near normal was used. Obese patients were reduced before the study was started. Each patient continued his same general daily duties as prior to treatment, or in most instances, felt well enough to increase daily activity.

Placebo therapy had been used on most of the 49 patients started in 1950 with the "Veriloid" treated group with little or no benefit. For this reason, placebos were administered to the remainder of the group only when the patient had become normotensive and we wished to see the reaction upon withdrawal of the drug without the knowledge of the patient. This was done on fourteen patients with each one reacting identically. The pressure would remain normotensive for about two weeks and then gradually return to near pretreatment levels in from six to fourteen weeks.

To permit visualization of results, graphs were made of each patient's bloodpressure and pulse rate during the period of treatment. It was found that, when whole root or alseroxyton was given initially and then after a definite hypotensive curve had been established, reserpine alone was given, the curve would rise and then slowly start down again. Figures 1 through 5 demonstrate graphically the results on five representative cases. Generally, alseroxyton produced hypotensive and bradycrotic effects more rapidly than did reserpine. When the dosage of reserpine was increased sufficiently (0.75 to 1.0 mg. daily) to produce responses comparable to those produced with alseroxyton, patients complained more frequently of nasal stuffiness, fatigue and/or drowsiness.

A large percentage of the patients with more severe chronic hypertension showed little objective improvement from alseroxylon during the first few months of therapy. Some feeling of tranquility and the usual decrease in pulse rate occurred, but the blood pressure, particularly diastolic, changed little. With continued treatment, after a year or even two, these patients began to exhibit definitely good results. In 31 cases of the group, results based on blood pressure readings alone would have been classified as unsatisfactory if treatment had been terminated after the first year. In all of these 31, blood pressures were reduced in the second or third year of treatment. None manifested any untoward symptoms or complications. The process was so gradual that physiological adjustments were easily and safely made.

Of the 87 patients, 66 were female and 21 were male. Their average age was 56.2 years, the youngest being 24 and the oldest 80 years. Twenty were obese when first seen but reduction to normal weight was effected before Rauwolfia therapy was started.⁶ Satisfactory response was manifested in an average time of 38 weeks; the shortest period was 13 weeks and the longest 107 weeks.

The average pretreatment blood pressure was 196/110; the highest was 290/134. After the apparently maximal effect of alse-

roxylon therapy had been obtained, the average pressure was 144/82. The highest post-treatment blood pressure was 200/100 and the lowest was 120/68. Pulse rates dropped from an original average of 88 per minute to a post-treatment average of 68.

Hypertension in the group was classified as mild in 11 cases, moderate in 50, severe in 23 and very severe bordering on malignant in 3. Forty-three patients showed definite atherosclerotic changes; five of these also had chronic mild nephritis. There were no diabetics in the group.

Flicker test—The flicker fusion threshold has been routinely determined in this clinic for the past six years, since it is believed to have definite clinical value. Although the test is not new, it has generally been little used because the early testing apparatus was not easily handled. The newer instruments are easily managed and permit accurate measurement. With the newer apparatus, investigators⁷ have reported accurate measurement of vascular spasm in pre-eclampsia even before hypertension, albuminuria or other signs of toxemia were manifested. We use the instrument designed by Krasno and Ivy⁸ and their methods of procedure.

After five years of treatment the FFT is definitely improved in all 87 cases and has returned to normal 29. Indications are that return to normal will eventually occur

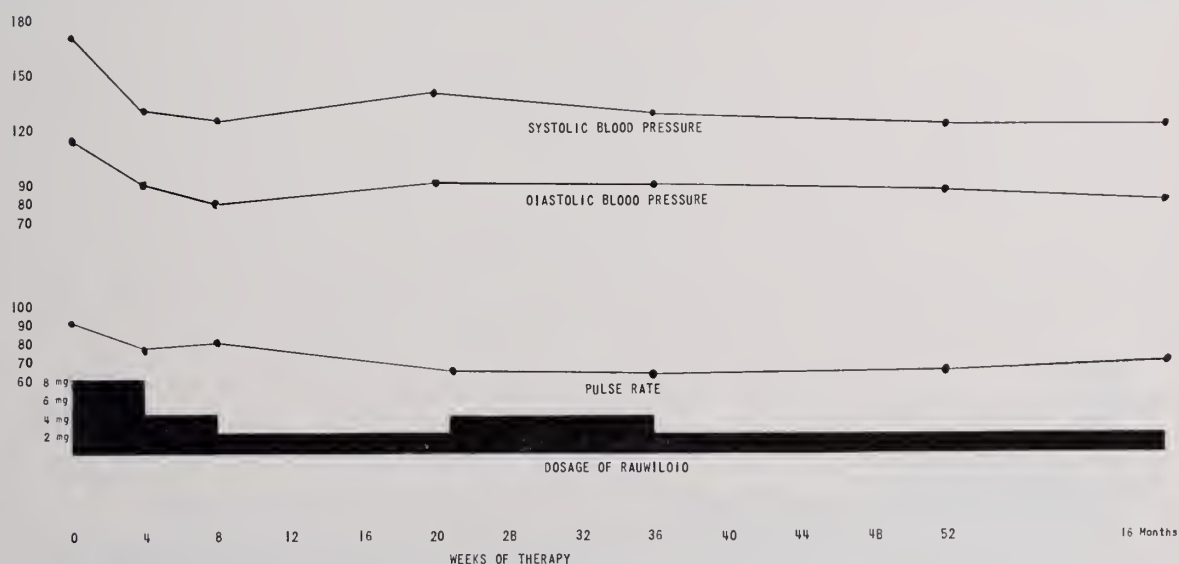


Figure 1 - H.S.B., Female, Age 42

in many more in the group with continued treatment. Twenty-one patients of this group, who had moderate to severe hypertension exhibited a constant or almost fixed FFT. In these patients, little response to Rauwolfia therapy was expected. However, in the first year of treatment they showed some subjective improvement, apparently as a result of the tranquilizing and bradycrotic effects; and surprisingly, during the second year their pressures began to decrease slowly. Within 16 to 26 months the pressure of this entire group had decreased to levels considered normal for their age and general status. FFT curves have returned to normal in six of these 21 cases.

Illustrative Cases

Case 1.—H.S.B., a 42 year old woman, first began to show signs of essential hypertension in 1949. Her blood pressure was then 150/100; by 1953 it had risen to 170/116. Treatment was begun January 27, 1953 with 500 mg. whole root Rauwolfia daily and continued with smaller doses until the end of the 36th week, when she was given 2 mg. of alseroxylon per day. The blood pressure and pulse rate responded as shown in Figure 1. The original FFT reading was as follows: Base, 2460; at two min-

utes following nitroglycerine sublingually it was 2550; at four minutes 2610 and at six minutes 2610. Tracings remained abnormal throughout treatment and still are so, though becoming nearer normal, i.e., showing much less spasm. The FFT January 20, 1954, with a blood pressure of 122/88 was 2610—2700-2670-2670; on May 26, 1954 with a pressure of 122/80, it was 2490—2520-2580-2580. September 1956 readings are almost identical with the 1954 record and the patient is being maintained with 2 mg. alseroxylon daily. Several times the drug has been discontinued and each time, after a few weeks the pressure starts rapidly up. It is probable that continued treatment will keep this patient's blood pressure normal and that her FFT will finally show no vascular spasm whatever.

Case 2.—C.B., a 52 year old woman, was first given a diagnosis of essential hypertension in 1946. Her average blood pressure for the next six years was 200/110. Her highest recorded pressure was 234/120, on November 7, 1952, when treatment was begun. Moderate cardiac enlargement and a grade 2 spasm of the retinal vessels was present. Results of general physical examination were otherwise essentially negative.

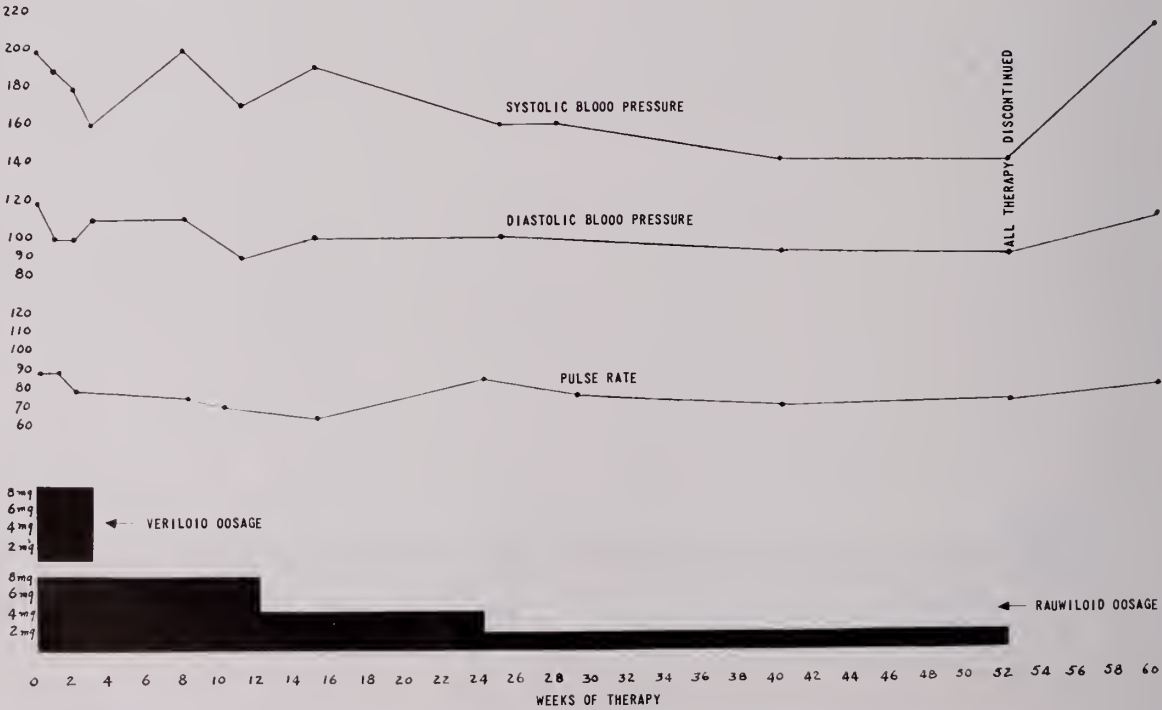


Figure 2 - C.B., Female, Age 52

Figure 2 shows the medication used and the patient's response. The first FFT reading was 2160—2190-2280-2280. After three months it was 2130—2160-2130-2130, and the blood pressure was 170/90. After nine months the FFT was normal (2160—2100-2070-2040) and the blood pressure was 150/90. Within eight weeks after cessation of treatment, the pressure had risen and the FFT again showed spasm. Treatment was reinstituted and the pressure started to decrease promptly, but the FFT still showed some spasm.

Case 3.—W.W.W., a 39 year old male, had severe essential hypertension, bordering on malignant type, and a family history with many deaths due to cerebral hemorrhages early in life. Counter to expectations, and despite many economic and other disasters suffered by this man, which would previously have proved most upsetting, treatment effected a slow decrease in blood pressure (Figure 3). After 22 months of Rauwolfia therapy, the pressure was reduced to normal and he was feeling very well, though farming by day and working as a watchman at night. The original blood pressure of 250/150 (FFT 2500—2550-2580-2620) had been reduced to 122/80 (FFT 2460—2460-2460-2520). This man was seen again last week, after about five years of alseroxyton. He had reduced his dose gradually from 6 mg daily to 2 mg. His pressure was 132/

88 and pulse rate was 68 and FFT was normal (2460—2420-2400-2420).

Case 4.—W.W.T., a 66 year old grocer (Figure 4) had been hypertensive for several years and showed pronounced arteriosclerotic changes. On April 24, 1952, when his blood pressure was 240/130 and he was having severe headaches, veratrum viride therapy was started. Alseroxyton was added on December 3, 1952, when the pressure was 196/120, and later used alone. On February 3, 1953, blood pressure was 220/128 and the FFT was 2100—2100-2100-2100. Since this indicated fixed vessels and since there had been no improvement in eight weeks of therapy, treatment might ordinarily have been discontinued. The patient, however, was encouraged to continue and on April 7, 1953 his pressure was 174/120 and the FFT was still unchanged. On August 7, 1953 the pressure had reduced to 144/108 and the FFT was 2220—2220-2460-2460. Therapy was continued through October 1953 when the patient discontinued treatment. He was seen again on January 12, 1954 with severe headaches, blood pressure of 180/124 and a fixed FFT. Alseroxyton therapy was started again and blood pressure slowly decreased over the following nine months to 138/80 with a normal FFT (2070—1980-1950-1920) and then another nine months later had further reduced to 120/80 with a continuing normal FFT. In

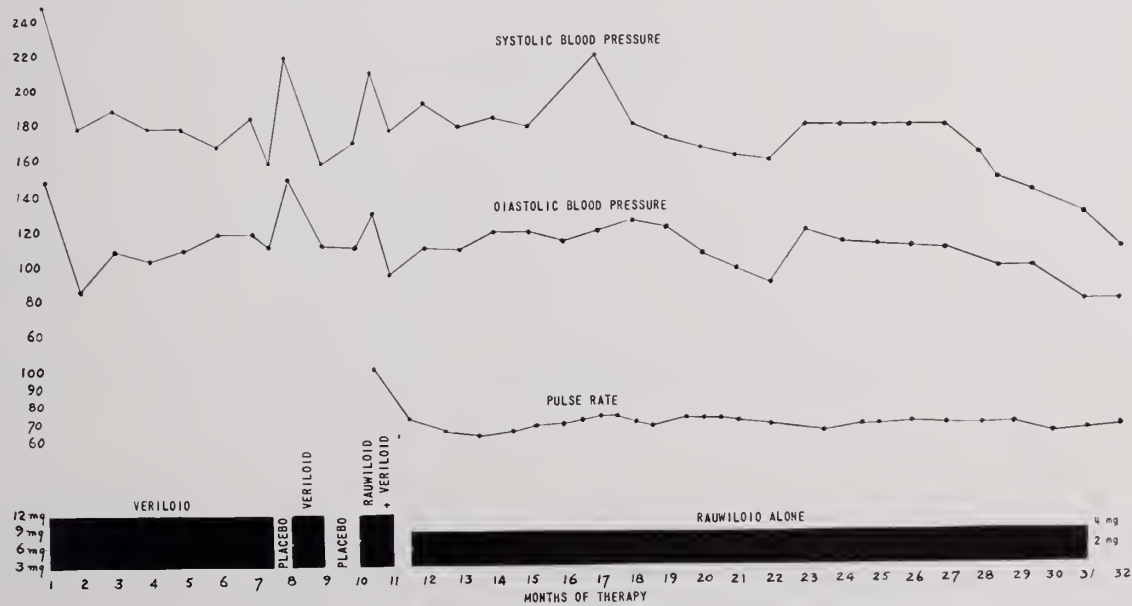


Figure 3 - W.W.W., Male, Age 39

April 1957 this man still has a normal pressure and is working full time with none of his original symptoms and is being maintained on 2 mg. alseroxylon daily.

Case 5.—J.A., a 75 year old female with severe atherosclerotic changes. Her blood pressure was 220/130 and FFT showed severe spasm of retinal vessels. After one year of therapy with Rauwolfia, her blood pressure was 142/80 and FFT showed marked improvement. After 18 months of treatment, blood pressure was 150/90 and FFT was about the same. Although her FFT still showed significant angiospasm there was pronounced improvement in other respects, such as general feeling of well being, ability to work and cardiac output. She is still being nicely maintained with 2 mg. alseroxylon daily. (Figure No. 5.)

Side Effects

As noted in the groups studied by Livesay, Moyer and Miller,^{1a} the most impressive incidental effects of alseroxylon therapy were those of a beneficial nature, e.g., mild sedation without somnolence and a general sense of well-being. Objectionable side effects of treatment with Rauwolfia serpentina alkaloids have been infrequent, occurring in

this series in approximately the same percentages noted in many published studies. In only one patient was it necessary to discontinue therapy because of side reactions. The side effects noted in the present series are listed below in the order of their frequency.

1. *Increased appetite* was common, apparently resulting from sedative action of the drug on the hypothalamus.
2. *Nasal stuffiness* occurred, but to a mild degree, usually disappearing after one or two weeks or with reduction of dosage, or with addition of antihistamine therapy for a few days.
3. *Fatigue* was usually a symptom of overdosage.
4. *Diarrhea* was fairly common with the whole root but is very infrequent with either alseroxylon or with reserpine.
5. *Symptoms of increased gastric acidity* were of fairly common occurrence, particularly in patients who had previously had those symptoms. This side effect was relieved with common antacid agents.
6. *Dermatitis* developed in only one patient. She developed a bullous dermatitis

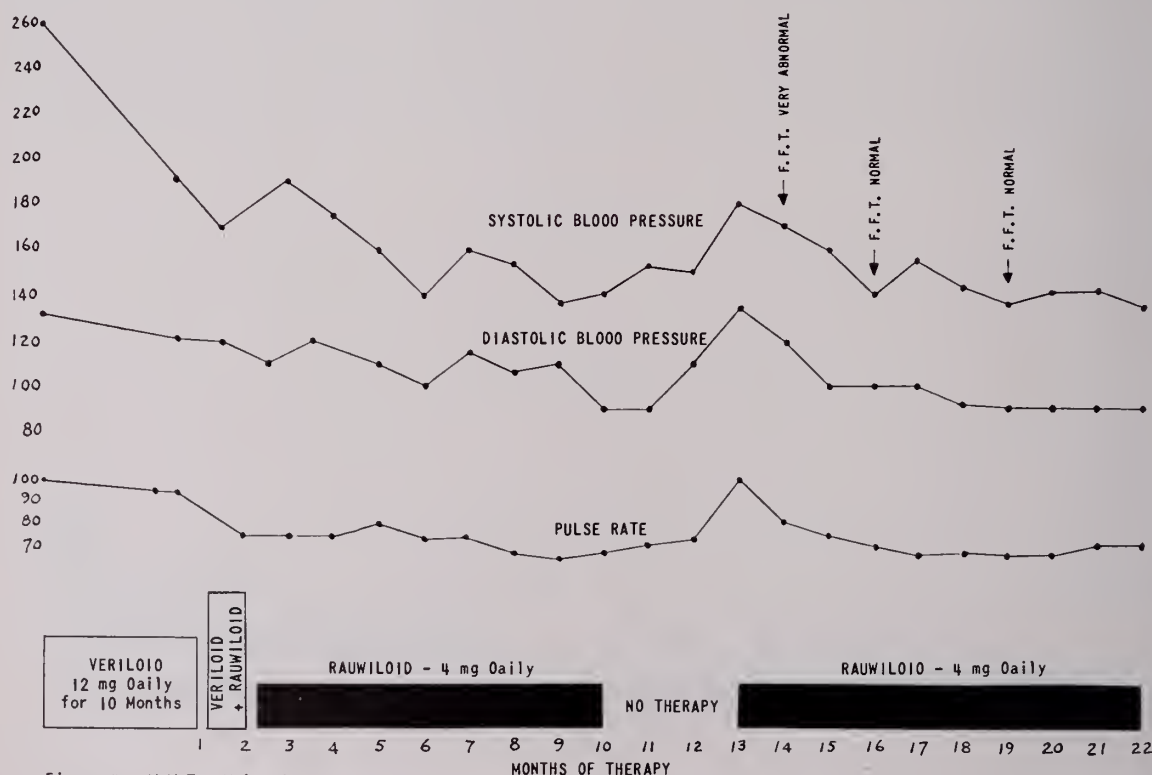


Figure 4 - W.W.T., Male, Age 66

with severe pruritis while taking 1 mg. of reserpine per day. Although contact patch tests with reserpine were negative, the dermatitis cleared completely when treatment was stopped and recurred with reinstitution. After the skin again healed, the patient could tolerate a daily dose of 4 mg. alseroxylon with no ill effects.

7. *Decreased libido* (but not impotence) was experienced frequently by male patients while they were receiving large doses of Rauwolfia or any of its alkaloidal extracts. Libido returned to normal with reduction of dosage.

8. *Gynecomastia* developed in 4 male patients treated with Rauwolfia for long periods. The ages of the four ranged from 25 to 80 years. In three of these patients gynecomastia occurred after three or four months of treatment and in one after a year of treatment. The condition was unilateral in one and bilateral in three. Mastectomy was performed in one patient and biopsy showed simple gynecomastia. The other three were treated with testosterone. The changes in the breast slowly reversed during continued Rauwolfia therapy but it was demonstrated that an increase in dosage caused a flare-up of the condition within a few days. In these patients there was no perceptible increase in breast size, but a tender pea-size nodule developed just under

the nipple, with extreme tenderness of the nipple itself.

9. Several patients with rheumatoid arthritis in this group and one patient with psoriasis showed marked improvement as was expected from previously reported effects of Rauwolfia in these two conditions.¹⁰

10. *Mental depression* occurred in one patient, a physician, who became severely depressed and had suicidal thoughts. The drug was withdrawn in this case. It is interesting to note that this man had taken alseroxylon for about a year with a good result so far as his hypertension was concerned. Then he changed to a whole root preparation and following a few weeks of this his mental depression developed. One might postulate as to whether the extra amount of indole nucleus contained in the yohimbine and other alkaloids making up the whole root might have affected his serotonin level more than did the refined fraction, thus producing an artificially induced psychosis. He was fearful of taking the alseroxylon again even on a trial basis to see if he could tolerate this fraction of the root.

11. *Estrogenic response in the female.* It was noted with considerable interest that many of the post-menopausal women taking Rauwolfia or its extractions had an estrogenic type response. These included mild

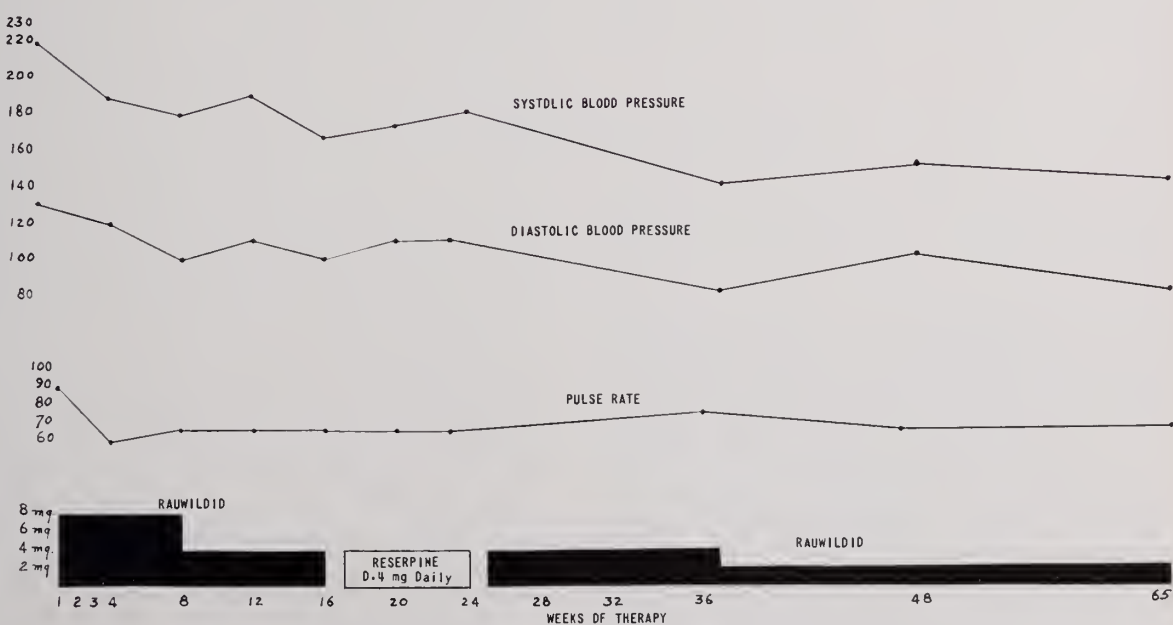


Figure 5 - J.A., Female, Age 75

breast congestion (although not taking estrogen); estrogenic stimulation of vaginal mucosa as shown by microscopic study; a number of women taking subclinical doses of estrogen for post-menopausal care began to spot with mild vaginal bleeding and ceased to do so when their previous dose of estrogen was halved. Evidently the Rauwolfia had an estrogenic effect or acted synergistically with the estrogen already being administered.

Discussion

Since the advent of alseroxylon, objections to the use of antihypertensive drugs,¹² because of serious side effects, must certainly be revised. Clinical experience indicates that these agents produce mild sedation, without somnolence, via the hypothalamus. There also appear to be endocrine effects, either primary or, more likely, secondary.¹³ The occurrence of gynecomastia in four patients in this author's experience and in two reported by Wilkins^{1c} suggests that the steroid output of the adrenals may be stimulated by these alkaloids. The slowness with which results appear in many, the slowly manifested effect on psoriasis and rheumatoid arthritis,¹⁰ and the very long period of administration necessary before adequate hypotensive changes occur, all indicate that prolonged use of Rauwolfia alkaloids produces distinct physiologic as well as psychologic changes. It would be interesting to study the lipotropic pattern of patients before and after prolonged therapy with this drug.

Reserpine seems to be as effective as alseroxylon in treatment of anxiety states, but alseroxylon has proved superior in treatment of hypertension, probably because of the additional effect of rescinnamine which it contains.

When administered to normotensive patients, for indications other than hypertension, alseroxylon did not produce a fall in blood pressure to abnormally low levels. None of the patients in this series showed any evidence of tolerance or addiction to the drug. None manifested any serious complication necessitating discontinuance of the drug (save the one case of mental depression) probably because the very gradual effect of the drug made no overwhelming

demands on the body's ability to make adjustments.

I doubt the wisdom of producing precipitous drops in blood pressure in the great majority of hypertensive patients. In most cases a very slow increase in blood pressure has occurred over a period of years, as a result of atherosclerotic changes and other factors. Sudden reduction of pressure produces uncomfortable symptoms and is not without danger. Many clinicians feel that it is unwise to produce a so-called normotensive state in a patient who has had severe hypertension for years. Certainly a drug that will lower the blood pressure very slowly is far safer for the majority of hypertensive patients. The very potent and quick acting drugs should be reserved for patients with sudden exacerbations of hypertension secondary to acute and subacute states, toxemias, and the like.

Conclusion

The effects of long term administration of Rauwolfia serpentina alkaloidal extracts, particularly alseroxylon ("Rauwiloid") in cases of chronic hypertension are reported. Alseroxylon proved to be more effective than reserpine in the treatment of chronic hypertension.

In chronic hypertension, it was demonstrated that long term treatment with alseroxylon usually produces excellent results, even in refractory cases. It is suggested that failure of Rauwolfia therapy in many reported cases is attributable not to any inherent limitation in the efficacy of the drug, but rather to inadequacy of the treatment period, since the positive effects of these alkaloids are manifested slowly and gradually. It is felt that the potent and quick acting therapeutic agents should be reserved for use in critical situations.

Sufficiently long periods of treatment with alseroxylon resulted in improvement of the flicker fusion threshold (FFT) in all patients treated, with return to normal in 29 of 87 cases of chronic hypertension. Indications are that there will be continued improvement in many of the remaining cases.

Side effects were for the most part mild or actually desirable. Some unusual and

interesting side effects are described and discussed.

Acknowledgement:

The veratrum viride (Veriloid), Rauwolfia serpentina (whole root), Reserpine (Serpiloid), alseroxylon (Rauwiloid) and placebo tablets employed during this five year study were supplied by Riker Laboratories, Incorporated, Los Angeles, California.

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A.M.A. TV Programs Win Awards

Medicine is making a name for itself in the world of television. Recently, three A.M.A.-sponsored programs walked off with national and local awards in competition with commercially-sponsored programs. At the fourth American Film Assembly sponsored by the Film Council of America, A.M.A.'s newest TV film "Even for One" received the Golden Reel Award in the institutional promotion category. "Monganga"—a filmed report on a medical missionary which was produced by Smith, Kline & French Laboratories in cooperation with

A.M.A.—received the Silver Reel Award at the same show.

Locally, A.M.A.'s second series of 26 programs for "Baby Time" received the Chicago Federated Advertising Club's top award for "outstanding achievement in advertising by Chicago talent." The honor was made jointly to the A.M.A. and Herbert S. Laufman and Co., the producers. The A.M.A.'s Bureau of Health Education announces that 13 selected films from this series are being made available for a period of one year, without charge, to medical societies for placement on local public service time.

CARCINOMA *of the* STOMACH

Arising in a Benign Ulcer

JOE M. PARKER, M.D., WILLIAM T. SNODDY, M.D.,
and RALPH C. DENNY, M.D.

The possibility of cancer arising in a pre-existing gastric ulcer has been debated for many years. There is evidence that benign gastric ulcer gives rise to carcinoma in some instances. Ewing believed that two to five per cent of all gastric cancers arose in a previously existing benign ulcer of the stomach.¹ On the contrary, there are many who believe that the two diseases are in no way related and that ulcer never develops any malignant changes.

Mallory, in 1940, reported four instances of cancer of the stomach in association with ulcer. He interpreted this as evidence of secondary peptic ulceration in association with the carcinoma. In other words, he believed that the cancer came first and that any ulceration accompanying it developed in an area of lowered susceptibility. He advised great caution in attempting to interpret from the histologic picture the genesis of malignant ulcer.² Borrmann has stressed that cancers ulcerate, but ulcers do not carcinoma.³ The two differences of opinion regarding the relationship between gastric ulcer and gastric cancer are summarized by Waugh and Charendoff⁴ and again by Brown and Associates.⁵

Brown and Associates believed that 1.1 per cent of presumed benign gastric ulcers proved to be malignant at resection, although only one-third of their total cases were subjected to resection. From their analysis of 520 cancers of the stomach over a five year period, they concluded that 1.5 per cent arose in previously existing benign ulcers. Their conclusion from the rather extensive series was that "while benign gastric ulcer may undergo malignant change, it rarely does so, and the greatest majority of carcinomas of the stomach do not arise from a pre-existing gastric ulcer."

Ekstrom found a very high percentage of cases in which carcinoma of the stomach arose in a benign ulcer. On the basis of

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clinical and pathological data, he reported that 11.6 per cent of carcinomas arose in chronic gastric ulcers. His material consisted of 274 cases of carcinoma of the stomach operated on over an eleven year period at the Centrallasarettet. Eight per cent of his patients had roentgenologic signs

of previous ulcer located at the site of the proven cancer, and these also had pathologic evidence of ulcer previous to the cancer.⁶

It is difficult to understand why there should be so much disagreement among series of this type. Certainly these figures are not to be confused with that of the chance finding of cancer of the stomach in a series of presumably benign gastric ulcers. The Mayo Clinic found that 13 per cent of suspected benign gastric ulcers, as judged by clinical features, proved at operation to be malignant.⁷

This hotly debated subject was the basis of an excellent symposium—"The Relationship of Ulcer to Gastric Cancer" which was reported in *Cancer*. In essence, the conclusions of the panel were as follows: Gastric ulcer and cancer cannot be differentiated except by microscopic analysis in any given instance. There was general agreement that cancer does arise in pre-existing benign gastric ulcer in a small percentage of cases. And finally, the differentiation between acute and chronic gastric ulcer was clarified.⁸

Pathologists have carefully defined the criteria for establishing development of malignant change in a gastric ulcer. These criteria are summarized well by Ackerman who also emphasizes that the validity of such an assumption primarily depends on the pathologic study.

"The histologic criteria for making a diagnosis of carcinoma arising on the basis of a pre-existing chronic ulceration are as follows: the base of the ulcer is devoid of carcinoma and there is invariably destruction of the muscularis with replacement by dense fibrous tissue. The ulcer floor is made up of scar and granulation tissue. The free ends of the muscle are bent upward into the ulcer margin and are sharply demarcated against the connective tissue of the base (Klein, 1938).

"Often there is fibrous thickening on the serosal surface which is continuous with the base of the ulcer. Small arterioles are often obliterated. These signs indicate a process of long duration. Carcinoma usually occurs in the margins of the ulcer in single or multiple zones and

presents a disorderly glandular pattern. As the disease spreads, it extends out to the serosal surface and only in an advanced stage is the base of the ulcer invaded. Fusion of the muscularis mucosae and muscularis propria is said by Newcomb to occur in 100 per cent of the patients with chronic peptic ulceration. Comori felt that the presence of this sign depended predominately upon the stage of the ulceration and found actual fusion in only thirty-four of sixty-four cases. Carcinoma only rarely occurs on the basis of a healed scar due to pre-existing ulcer. A primary carcinoma may ulcerate, but the loss of substance rarely transgresses the true muscular coat."⁹



Figure I—Upper G. I. series on 12-31-51 demonstrating prepyloric ulcer crater.



Figure II—Upper G. I. series on 10-27-54 demonstrating prepyloric ulcer crater in same location.

We are reporting an instance of a carcinoma of the stomach which we believe originated in a pre-existing ulcer. Roentgenograms taken in 1951 and again in 1954 show a prepyloric ulcer in the identical location throughout both series. Furthermore, the patient had complained of peptic ulcer distress for at least twenty-five years. This case is being presented because we believe that it demonstrates strong evidence of both radiologic and pathologic nature for the development of cancer in a chronic gastric ulcer. It would seem that the x-ray and pathologic evidence for the development of the small focus of carcinoma in this instance is overwhelming, unless one postulates that the carcinoma of the stomach had been present and non-invasive for at least three years. Because we feel that this case is unusual and significant, the history and findings are presented in some detail.

Case Report

A 69 year old white male was first seen at St. Anthony's hospital in 1951, with a history of stomach complaints for a period of 25 years. During these preceding years he frequently was nauseated and vomited easily. The stomach complaints had gradually increased and he had taken large amounts of antacids and soda over a number of years. The past history was otherwise negative. Roentgenologic examination on December 13, 1951, revealed the presence of a prepyloric ulcer (Fig. 1). Medical management had apparently given some relief of symptoms. However, approximately three (3) months before the present admission, on October 20, 1954, he began to complain of nausea. He had noted an increasing tendency to vomit during this time and had been able to take only liquids. For four weeks preceding admission he had vomited an average of two times weekly. About two weeks before admission he was seen at another institution, and his general physical state was considered good. Red blood cell count at that time was 4,620,000. An x-ray of the chest was negative. The gastric analysis revealed 40 units of free hydrochloric acid after an Ewald meal. Fluoroscopic examination at that time was interpreted as showing pyloric obstruction. He stated that during the past year he had lost approxi-

mately 20 pounds. Roentgenologic examination on October 27, 1954, revealed a prepyloric ulcer in the identical location as previously seen (Fig. 2). He was admitted to this hospital on October 30, 1954, and physical examination at that time revealed a patient of average size. The heart was not clinically enlarged and the rate and rhythm were regular. The lungs were clear. The abdomen was soft and there was no evidence of distention. There was a suggestion of a palpable mass in the right upper quadrant and he was mildly tender in that area. The liver and spleen were not felt. The prostate was slightly enlarged, and no nodules were noted. There was no evidence of a rectal shelf. At operation on November 3, 1954, a lesion on the lesser curvature at the pyloric end of the stomach was present. Although this grossly did not appear to be malignant, it was thought that because of the possibility of malignancy a radical subtotal gastrectomy should be done. In addition to a large portion of the stomach, part of the head of the pancreas and the entire omentum were removed. The ulcer had extended directly into the head of the pancreas.

Pathological Description

The specimen consisted of a portion of stomach which measured 25 cm. along the greater curvature and 11 cm. along the lesser curvature. The gastroph hepatic ligament and the gastrocolic ligament were attached to the specimen. The serosal surface was smooth except for an area of roughness and adhesions on the lesser curvature just above the pylorus. Within these adhesions a portion of pancreas measuring 3.5 x 3 x 1 cm. was present. After opening the stomach, the ulcer was seen to be 2.2 cm. across and the crater was 1 cm. in depth. The ulcer was located on the lesser curvature just above the pylorus and appeared to be in the exact location as that seen on the x-ray films. On the cut surfaces the ulcer appeared to extend through the entire thickness of the muscle wall. The muscle wall of the stomach was seen to stop abruptly on each side of the ulcer. The base of the ulcer had a firm, white appearance as is seen in a benign lesion, and our gross impression was benign peptic ulcer of the stomach. Microscopic examination revealed the surface of the ulcer

to be covered by fibrin and polymorphonuclear leukocytes as well as nuclear debris. Immediately beneath this area, there was fibrinoid necrosis which also contained some nuclear debris. The next zone was loose fibrous connective tissue with many newly formed small blood vessels and this blended with dense fibrous connective tissue which extended through the entire thickness of the wall (Fig. 3). In some of the sections there was a portion of pancreas adherent to the dense fibrous connective tissue about the base of the ulcer. In the proximal portion of the ulcer a very small rim of carcinoma was present (Fig. 4). This was composed mainly of undifferentiated cells with only a vague attempt at forming acinar structures. The entire ulcerated area was blocked at 2 mm. levels, and 25 sections were examined. These sections revealed the carcinoma to extend across the proximal portion of the ulcer and along the anterior margin of the ulcer nearly down to the duodenum; however, it did not involve the duodenum (Fig. 5). The posterior or left margin of the ulcer was free of carcinoma cells. The base of the ulcer was completely devoid of carcinoma. The rim of carcinoma had a radius measuring up to 0.6 cm. No carcinoma was present in 12 lymph nodes.

Summary

A case is presented which fulfills all of the requirements, radiologically and histologically, of a carcinoma of the stomach arising in a pre-existing benign ulcer. Photographs of the x-ray films and microscopic slides are included.

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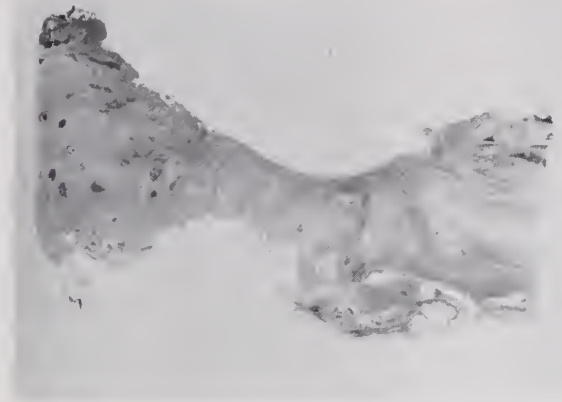


Figure III—Photomicrograph of ulcer base demonstrating inflammatory reaction and fibrosis. (Rim of malignant change on left.)

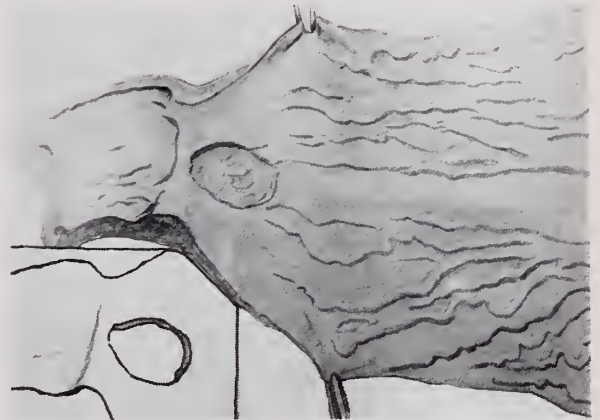


Figure IV—Drawing of surgical specimen showing location and extent of ulcer crater. Shaded area in inset represents entire area of malignant involvement.

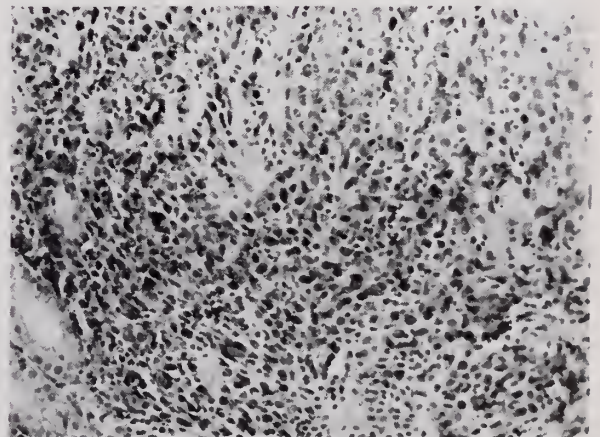


Figure V—Photomicrograph of section from area of malignant involvement.

THE INCURABLE WOUND

BERTON ROUECHÉ

On October 30, 1951, a woman I'll call Mabel Tate, the wife of a West Texas cotton planter, was admitted to the Parkland City-County Hospital, in Dallas, with a tentative diagnosis of bulbar poliomyelitis. The record also noted, as is usual in ambiguous cases, two possible variant readings. They were epidemic encephalitis and, at the suggestion of the Tate family doctor, influenza. The general nature of her trouble, however, was somewhat less uncertain. All major signs and symptoms reflected a virus invasion, and one of massive, if not overwhelming, proportions. Mrs. Tate was blazing with fever, she was wildly agitated, and she was unable to speak, unable to swallow, and unable to move her left arm. Four days later, she sank into a coma, and died. Something about the manner of her death prompted the attending physician to request a clarifying postmortem examination. The autopsy was done, with Mr. Tate's consent, early the following day. When the attending physician reached the hospital that morning, a report of the laboratory findings was on his desk. It began, "Encephalomyelitis with demonstrable Negri bodies in central motor neurons . . ." There was no need to read any further. That emphatically answered his question. Negri bodies are distinctive clusters of cellular substance whose presence in the brain has just one denotation. Mrs. Tate was a victim of rabies.

The attending physician once more sought out Mr. Tate. He told him what the pathologist had found and what the finding meant. That being the case, he went on to explain, two corollary conclusions were obvious. One was that Mrs. Tate had been attacked and bitten by a rabid animal. The other related to the approximate time of the attack. In view of the usual incubation period of rabies, he felt, it had probably taken place between two and six weeks earlier. The doctor spread his hands. All that remained was to establish the specific source of infection.

THE AUTHOR

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It could have been a dog. It could have been a cat or a fox. It might even have been a skunk. There were numerous possibilities. Mr. Tate nodded. He appreciated the doctor's position. He doubted, though, if he could be of much help. It depended on what the doctor meant by an animal. His wife had been bitten, all right, and fairly recently, too. On October 9th, to be exact. But it wasn't a dog or a cat or any of those. It was a bat. His wife had come across it lying in the road near their house. She thought it was dead, and stooped down to take a look. The next thing she knew, it had jumped up and given her a nasty nip on the left arm. Then it had flown away.

The doctor hesitated. Very curious, he said. And certainly a most curious coincidence. He shrugged, and rose. But, of course, that was all it could be. The only species of bat in which rabies had ever been demonstrated was the vampire, and its range was limited to tropical Latin America. He was forced to conclude that Mr. Tate was mistaken. There must have been another animal episode. It could have happened as much as a year before. Such cases were uncommon but possible. Either Mr. Tate had forgotten or his wife had neglected to tell him. The doctor returned to his office and took out the record of the case. He closed it with the notation "Rabies, source unknown."

Officially, the animal responsible for the death of Mrs. Tate is still not known. There is little possibility now that its identity will ever be irrefutably established. The rules of scientific evidence are too rigid for that. Nevertheless, in the opinion of most interested epidemiologists, the case no longer presents much of a riddle. Several subsequent events, they feel, have rendered it to all practical purposes clear. The first of these occurred on a cattle ranch some thirty miles southeast of Tampa, Florida, on June 23, 1953. Around ten o'clock that morning, the stockman's son, a boy of seven whom I'll name David Bonner, was playing in the back yard when a bat burst out of a nearby clump of trees. He called to his father, who was at work a short distance away, and pointed. Mr. Bonner glanced up, and stared. It was odd enough to see a bat abroad in the full light of day, but the creature's behavior was even stranger. The bat, when Mr. Bonner first caught sight of it, was circling the house. An instant later, it turned and streaked straight for the woods. Then it was back again—flying high, low, and every which way. Suddenly, from almost directly overhead, it swooped. David screamed, and tried to run. But it was too late. The bat was already upon him. Mr. Bonner crossed the yard in a bound. He caught his son and swung him about. The bat was clinging to the boy's chest, its teeth sunk deep in his flesh, and blood was staining his shirt. Mr. Bonner broke its grip with a back-hand swipe. It dropped, with a strangled hiss, to the ground. He gave it a kick, for good measure. Then he picked up his son and carried him into the house.

David was more frightened than hurt. While Mrs. Bonner held and comforted him, his father examined the bite. It was an ugly wound but a small one, and not, Mr. Bonner decided, in any sense serious. There seemed no need to call a doctor. He cleaned the bite with soap and water, dusted it with sulfanilamide, and covered it with a gauze dressing. That—for the moment, at least—appeared to be sufficient. It didn't, however, put his mind altogether at rest. The circumstances of the assault, he had to admit, were, if nothing else, uncomfortably queer. Mrs. Bonner agreed. They held a hurried conference and reached a prompt decision.

Mr. Bonner fetched his jacket and a paper bag, and returned to the back yard. The bat was lying where he had kicked it. Its fur was sandy brown, with yellow over-tones, and except for its saucer ears and its long, web-fingered forearms, it might have been a field mouse. It was also, he relieved to find, dead. He scooped it into the bag, and went on to the garage and his car. Forty minutes later, he was in the Tampa office of the Florida State Board of Health, closeted with a staff epidemiologist.

Mr. Bonner began the interview with a brief account of the incident. He then produced the bat and stated the reason for his visit. He wanted to have the creature examined. It was his understanding, he said, that bats were capable of transmitting rabies. He remembered reading in a livestock journal that they had been linked to an outbreak of the disease among cattle somewhere in South America. That was true, the doctor replied. There had, in fact, been many such cases, and not only among cattle. Several human cases were also on record. Bat rabies, as it was awkwardly called, was endemic in several Latin-American countries. They included Brazil (where the phenomenon was first reported), Honduras, Mexico, Columbia, Venezuela, Surinam, and the island of Trinidad. But, he pointed out, the bats involved were not ordinary bats. They were bats of a kind unknown outside the tropics. They were true, or bloodsucking, vampires. The bat that Mr. Bonner had brought with him was a harmless Florida yellow, a member of the species *Dasypterus floridanus*. It subsisted, like all other bats in the United States, exclusively on insects. Those were the facts. They didn't, of course, explain the attack. He had no theory about that. It was his opinion, though, that the facts held no cause for alarm. The doctor paused. However, he added, it was impossible to deny that the bat had behaved very strangely, and he quite understood how Mr. Bonner felt. A certain amount of uneasiness was only natural. Consequently, in order to settle the matter, he would send the bat along to the board's local laboratory for a routine brain examination. The result, he was confident, would be completely reassuring.

Mr. Bonner left the Board of Health at a

little past one. By the time he reached home, it was almost two. At three, he was called to the telephone. It was the epidemiologist in Tampa, and he sounded stunned. He was calling, he said, from the laboratory. A bacteriologist there had just finished a microscopic examination of the bat's brain, and Mr. Bonner, incredibly, was right. The findings were positive for rabies. Arrangements were now being made for the usual confirmatory tests. They involved the inoculation of laboratory mice with bat-brain material, and would be done at the main State Board of Health laboratory, in Jacksonville. But that was largely a formality. The microscopic evidence was in every essential conclusive. Mr. Bonner's son had been bitten by a rabid animal, and it was imperative that preventive measures be taken at once. Could he bring the boy in to the Tampa office that afternoon? Mr. Bonner could, and did. The Pasteur treatment, as the immunizing procedure against rabies is called (in commemoration of its creator), requires a subcutaneous injection of anti-rabies vaccine every day for two weeks. David completed the course, apparently with success, on July 7th, but because of the variable length of the incubation period in rabies, the summer was well over before it could be said that he was in all probability out of danger. That he had been in danger was beyond dispute by then. The Jacksonville tests had confirmed the fact, and so had an even more elaborate investigation, conducted at the request of the Florida authorities by the United States Public Health Service, at its Virus and Rickettsia Laboratory, in Montgomery, Alabama. It was also certain by then that David's experience could not be dismissed as an isolated freak of misfortune. Late in September, while he was still under regular observation, a woman I'll call Frances Roberts suffered an almost identical attack, and that was closely followed by a third. The scene of both was eastern Pennsylvania.

The second Pennsylvania episode, though the least unequivocal of the three cases, was by far the most unsettling in its implications. Unlike the others, it happened in a city, and indoors—in a tavern in the central business section of Harrisburg. Its victim was a used-car salesman I'll identify as Carl

Dayton. Shortly after midnight on Saturday, November 28, 1953, Mr. Dayton was standing with a group of friends at the tavern bar. Something brushed his face. He stumbled back, looked up, and saw a bat. It was dodging from wall to wall, just below the ceiling, and was heading toward the rear of the room. There was an open window there, but the bat made no attempt to escape. Instead, it circled back to the bar, lower now and moving fast. The bartender tried to whip it down with a towel, and one of the customers swung his hat at it. Both of them missed. Another struck out with a rolled newspaper, and caught it a staggering blow. It fell to the floor at Mr. Dayton's feet. He squatted down for a look, then sprang up with a yell and began to pound on the bar. His friends stood frozen, and stared. The bat was fixed to the back of his hand, and before he could shake it off, it had bitten his thumb to the bone. The bartender was the first to recover. He slammed the bat across the room, and this released the others. They charged the bat and stomped it to death and threw it into the street. That, to the impairment of the subsequent investigation, was the last of the bat. Then, more sensibly, they inspected Mr. Dayton's wound. It was obvious that he needed medical attention, and after bandaging his thumb with a handkerchief, they fetched a cab and sent him off to Harrisburg Polyclinic Hospital. From the hospital where an interne (either unimpressed or unconvinced by his explanation of the accident) was satisfied to merely clean, close, and properly dress the wound, Mr. Dayton went home to bed.

Mr. Dayton, like David Bonner, is still alive, and for much the same reason. In his case, too, chance decisively intervened. Within an hour after the accident, a reporter on the Harrisburg *Patriot*, the city's morning newspaper, emerged from his office, hailed a cab, and headed home. In the course of the trip, the driver began to talk. There was one thing about hacking, he said—anything could happen. Take tonight, for example. He had just come back from hauling a man to Polyclinic Hospital, and guess what was the matter with him. He'd been bitten on the thumb—by a bat! It was a mean-looking wound, too. His whole hand

was covered with blood. But who ever heard of a bat attacking a man? He didn't know whether to believe it or not. Neither did the reporter, but it struck him that, if true, it was a possible story. The following day, on the way to work, he stopped by the hospital. A glance at the outpatient record established the facts of the matter. He then, with providential thoroughness, dropped around to the office of Ernest J. Witte, chief of the Division of Veterinary Public Health of the Pennsylvania Department of Health, and asked what they meant. The case they described was news to Dr. Witte, but he answered without hesitation. They meant, he said, reaching for the telephone, that his division would investigate the incident at once. One phase of the inquiry would involve a search for the bat. Another, infinitely more urgent, would be concerned with Mr. Dayton. He must be found and returned to the hospital for immediate prophylactic treatment. The bat, in all probability, had been rabid.

Dr. Witte's hunch, though spontaneous, was anything but blind. He had good reason to associate belligerent bats with rabies. The relationship, indeed, was one with which he happened to be peculiarly familiar. His knowledge derived not only from the alerting example of the Bonner episode, a bulletin on which the Public Health Service had promptly dispatched to all state health officers, but also, more recently from direct professional experience. That had been provided by the case of Frances Roberts. On the afternoon of September 29th, as Dr. Witte late reported to the American Public Health Association, Mrs. Roberts, the wife of an amateur ornithologist at Boiling Springs, an upland resort about twenty miles west of Harrisburg, had accompanied her husband on a canoeing jaunt across a lake near their home. Toward six o'clock, deciding to stretch their legs before turning back, they beached their craft on a wooded shore, and Mr. Roberts wandered off to observe a flock of waterfowl.

Mrs. Roberts stayed by the canoe, and she was standing there, Dr. Witte noted in his report, when "a bat suddenly landed on [her] upper arm, and bit her without warning or provocation. The woman . . . was

startled by the attack and could not immediately identify the object clinging to her arm. Because of her fright, she does not recall distinct biting sensations, although she was conscious of the creature's scratching. Still not knowing what the object was, she finally grabbed the bat with her other hand and threw it against a nearby fence, where it remained stunned by the blow. [Mr. Roberts] was attracted by the commotion and quickly identified the animal as a [hoary, or *Lasiurus cinereus*] bat. Being a naturalist, with considerable knowledge and background in wildlife, he quickly recognized the behavior of the bat to be abnormal. He had the presence of mind to act with swiftness and cleverly trapped the creature in a pail, which he had nearby, and covered it with a newspaper. In a matter of minutes, the party headed back by canoe . . . to their home. [Mrs. Roberts] proceeded immediately to the doctor for treatment . . . The physician reported that the patient received attention within one hour after the biting episode. He scrubbed the wound thoroughly with surgical soap and cauterized the wound, using an electric cautery. There were three distinct tooth marks on the upper arm, between the elbow and shoulder. He then called the [State] Health Department for advice on the handling of this case. Motivated to a large degree by the reports of the Florida experience, we immediately recommended antirabies prophylaxis." At the same time, Mr. Roberts was asked to deliver the bat to the Harrisburg laboratory of the Department's Bureau of Animal Industry. He did so the following morning. "Touch preparations and, later, sections of the bat's brain revealed typical Negri bodies," Dr. Witte continued. "These were confirmed by the Director of Laboratories, Pennsylvania Department of Health, and by the Virus and Rickettsia Laboratory of the U. S. Public Health Service. Two rabbits were injected intracranially with the bat-brain material. Both animals developed clinical symptoms of rabies and died [within] twenty-seven days. [Meanwhile], starting October 1st, [Mrs. Roberts] received fourteen injections of vaccine. [She] suffered no adverse reactions during the entire course of treatment . . . As of this date [November 10, 1953], she remains

in good health, but is still under her physician's care."

Although it was Dr. Witte who brought the attack on Mrs. Roberts to general medical attention, his report was not the first account of his misadventure. The first was a newspaper story, less comprehensive but equally stirring, that was widely published throughout the East within a day or two of the incident. Among those whom it particularly stirred was Frederick R. Taylor, an internist and professor of medical literature at the Bowman Gray School of Medicine of Wake Forest College, in Wake Forest, North Carolina. The news did not merely startle Dr. Taylor. It also inspired him to reflection, the nature of which he presently communicated to a colleague in Georgia. His letter, which has been preserved, began with a forceful summary of the Roberts case. This was followed by some lines to the effect that he had long been imperturbably aware of the existence of rabies in Latin-American vampires. "But," he then exclaimed, "an ordinary, insectivorous bat!!! What would happen if the Western bats that live literally by the millions in Carlsbad Caverns, New Mexico, got an epidemic started there? I have seen a high cloud of countless hordes of bats come out of the Caverns' mouth at dusk. Too horrible to contemplate!"

Dr. Taylor's letter was dated October 19, 1953. Little more than two years later, on February 1, 1956, a news story authorized by the New Mexico State Department of Public Health appeared in the Santa Fe *New Mexican* under a six-column headline reading, "Carlsbad Cave Bats Infected with Rabies." "Rabies," it began, "has been discovered among the millions of bats at Carlsbad Caverns. It was a rabies epidemic which caused the death of hundreds of the Cavern bats in August and September of last year." The account continued:

Last Aug. 20, officials of the National Park Service at Carlsbad noticed dead and dying bats in increasing numbers. They were found on the floor of the caverns and in its entrance. Ranchers in the area also found dead bats. At that time it was thought that extensive insecticide spraying might have caused the deaths during the 10 day epidemic. But tests by the U.S. Public Health Service found no evidence of this. Instead, tests were begun to see if rabies had caused the deaths.

Lt. Col. Kennet Burns, chief of the veterinary virus laboratory at Ft. Sam Houston, Tex., collected specimens of dead and dying bats for examination while the epidemic was going on. Virus examinations by Burns revealed the presence of rabies in more than 50 per cent of the specimens, the department said. In addition, blood samples from a large number of live bats collected in flight at the caverns after the epidemic showed the presence of antibodies against rabies, indicating that many of the bats had been exposed to the disease some time in the past. . . .

The story also stated that although no human being had ever been known to be bitten by a bat while visiting the caverns, the health authorities had warned people against touching any of the creatures they might find dead or dying there.

Rabies is one of around sixty human diseases now known, or confidently supposed, to be of viral origin. Its causative agent is thus a member of the most mysterious form of life on earth. About all that can be said of the viruses is that they are supremely small (some are only just within the reach of an electron microscope), infinitely numerous (not even the bacteria are more ubiquitous), and almost incomparably specialized. All viruses are obligate intracellular parasites. They share with the rickettsiae the otherwise unique distinction of being unable to grow or reproduce outside the protoplasmic tissue of a living host. In general, the severity of a viral invasion reflects the functional importance of the particular cells to which the invaders are drawn. The virus of rabies is a neurotropic virus. Like the viruses of poliomyelitis and the several encephalitides, it has a special affinity for the cells of the central nervous system. It has, however, little else in common with any other virus. Its range, for one thing, is extraordinarily wide. Unlike the great majority of viruses (including the agents of smallpox, measles, yellow fever, poliomyelitis, infectious hepatitis, and the common cold), which can find in nature fewer than half a dozen satisfactory habitats, it is able to exist comfortably and abundantly proliferate in any warm-blooded animal. Its means of transmission is also peculiarly its own. Most viruses insinuate themselves into a host through either the respiratory passage or the gastro-intestinal tract. A few are conveyed by bloodsucking insects. The rabies virus enters by way of a bite contam-

inated with the saliva of one of its victims. In this respect, it might seem to resemble the various mosquito-borne viruses, but the resemblance is merely apparent. The latter are transmitted in the natural course of the carrier's search for food. There is nothing natural about the transfer of the rabies virus. It wrings collaboration from its carrier-hosts by torturing them into a homicidal fury. The incubation period of rabies (or the interval between the implantation of the organism and its establishment in the brain) is largely determined by the depth of the wound, its proximity to the brain, and the size of the original viral colony. This period, though disconcertingly variable, is seldom shorter than fifteen days and almost never longer than a year. But whether the virus reaches its destination in days or weeks or months, the result is inevitably the same. Rabies, in man, is a fatal disease. No recoveries are known.

The symptomatology of rabies is essentially the same in all susceptible animals. There are only superficial differences. The onset of the disease is generally mild and always indistinct. In man (and, insofar as can be determined, most comparably complicated animals), its earliest manifestations are those of any infection—a little fever, a dull headache, a scratchy throat, occasional nausea. This phase frequently lasts for two or three days, and sometimes even four, and is followed by a tingling pain at the site of the wound—the first diagnostically significant indication of rabies. Its grip, already fixed beyond release, then suddenly tightens. The muscles stiffen, the nerves tense, and the mind begins to fray with temper and apprehension. Anxiety quickens into fear. There is a vivid sense of approaching doom, a certainty of death. "A [rabid] patient weighed down with terror often becomes maniacal," D. L. Harris, medical director of the Pasteur Clinic in St. Louis, noted in a recent clinical study. "An excessive flow of thick tenacious saliva pours over his face and neck and becomes smeared on his hands and clothes and over the bedding and floor. These periods of rage are followed by moments of calm in which [he] usually shows anxiety for the safety of those around him and warns them of the approach of another crisis. Hyperesthesia of the skin to changes

of temperature, and especially to currents of air, and increased sensitiveness to sound and light mark the progress of cerebral irritation. Convulsions are brought on by the least irritation and by the slightest current of air . . . the breath comes in spasms, dyspnea is extreme, and there are epileptiform seizures or tetanic rigidity. Hydrophobia is rarely absent. . . . When the patient [attempts to drink], there is an immediate vise-like contraction of the muscles of deglutition with an excruciatingly painful spasm of the glottis and the pharynx. The body trembles with convulsive movements, the jaws are clenched, respiration is impossible. . . . After several attempts to drink, the pain is so terrific that despite intense thirst [the patient] cannot be induced to try to swallow liquids, and the sight of water or mention of the word brings on an attack. As a rule, death occurs after two or three days from cardiac or respiratory failure."

Although all highly developed animals are equally responsive to its gothic embrace, the rabies virus has its favored circle of hosts. It is naturally most inclined to frequent those best equipped to further its spread. This largely confines its normal range to the more prolific and short-tempered carnivores, a group that includes the fox, the wolf, the coyote, the jackal, the skunk, the mongoose, the cat, and the dog. Of these, the last, for reasons still obscure, has always been its most consistently conspicuous victim. The dog is also the animal in which its depredations were first recognized as those of a specific disease. Just when that occurred is uncertain. An allusion in the "Iliad" to "canine madness" has persuaded many medical historians that rabies may have been known to the Mediterranean world as early as the tenth century before Christ, and most believe, on the basis of rather stronger internal evidence, that the fifth-century Greek philosopher Democritus, who is chiefly remembered as a pioneer atomic theoretician and the teacher of Hippocrates, was probably conscious of its existence. The first explicit reference to rabies of which there is any record was set down by Aristotle, around 335 B.C., in his "Historia Animalium." "Dogs suffer from three diseases: lyssa, quinsy, and sore feet," he noted. "Lyssa drives the animal mad, and any

animal whatever, excepting man, will take the disease if bitten by a dog so afflicted; the disease is fatal to the dog itself, and to any animal it may bite, man excepted."

"Lyssa," a transliteration of "λύσσα," means "frenzy," and is the name by which rabies was originally known. The Romans gave the disease its modern name, which derives from "*rabere*," the Latin for "to rage," and has been in common usage since the first Christian century.

The Romans also modernized the Greek conception of rabies. A gifted encyclopedist of the early empire named Aulus Cornelius Celsus was among the first to raise his eyes from the pages of "*Historia Animalium*" and look squarely at the world around him. Having done so, he proceeded to challenge the first of Aristotle's comfortable exceptions as myopically veterinarian. All animals, he decided in his classic "*De Medicina*," were equally susceptible to rabies. Celsus was willing, however, to concede Aristotle's second exception. It was possible, his studies informed him, that the disease could be mastered in man. He then went on to propose a still valid preventive technique ("the wound . . . must be cauterized") and, less acutely, an antidote and a course of treatment. This consisted of thirty herbal ingredients (including poppy tears, Illyrian iris, Gallic nard, white pepper, male frankincense, and turpentine) mixed with honey and dissolved in a tumbler of wine. Its omission, he added, was risky. "When too little has been done for such a wound it usually gives rise to a fear of water," he wrote. "In these cases there is very little hope for the sufferer. But still there is just one remedy, to throw the patient unawares into a water tank which he has not seen beforehand. If he cannot swim, let him sink under and drink, then lift him out. If he can swim, push him under at intervals so that he drinks his fill of water even against his will. For so his thirst and dread of water are removed at the same time. Yet this procedure incurs a further danger, that a spasm of sinews, provoked by the cold water, may carry off a weakened body. Lest this should happen, he must be taken straight from the tank and plunged into a bath of hot oil."

Celsus's uneasy concession that rabies need not be fatal to man was accepted with-

out recorded dispute for fifteen hundred years. So, except for certain pharmacological refinements, were his methods of breaking its hold. Pedanius Dioscorides, whose "*De Materia Medica*" was the standard pharmacopoeia throughout the Roman era, contented himself with offering two alternative antidotes. One was a draught of hippocampus, or sea-horse, ashes. The other had as its active principle the leaves of the bladder campion. "This, being beaten when it is green, with old swine's grease, is good for the mad-dog-bitten," he wrote. Rufus of Ephesus, a second-century physiologist, preferred a draught of "wormwood, aristolochia, Lycian thorn, decoction of river-crayfish, water-germander, rock-parsley, and the root called gentian." Even Galen, the most observant, as well as the most imaginative, medical investigator in the millennia between Hippocrates and the Renaissance, had nothing to add to Celsus but a polished definition: "[Rabies] is a disease that follows the bite of a mad dog and is accompanied by an aversion to drinking liquids, convulsions, and hiccups. Sometimes maniacal attacks supervene."

After Galen, and the subsequent canonization of Greco-Roman medicine, the illumination of rabies, like that of all disease, was considered complete, and the subject complacently closed. The first attempt to reopen it was made in the sixteenth century. A Veronese savant named Hieronymus Fracastorius is usually celebrated for this act of desecration. Rabies, he announced in 1546, in his precocious "*Contagions, and Contagious Diseases and Their Treatment*," was an infectious disease, always communicated by the injection of saliva into the blood, and, notwithstanding the protestations of pharmacy, always irremediably fatal. He also emphasized this novel conception of the disease in a dissertation on hunting dogs. "What particularly calls for the care of the skilled mind," he wrote, "is when, inflamed with rabies, [the dog] attacks now these, now those and, turning against the master himself, he inflicts the incurable wound." Fracastorius was a man of towering intellectual stature. In addition to being a notable physician, he was a poet (the term "syphilis" derives from his "*A Poetical History of the French Disease*"), a

botanist, a geographer, a musician, a mathematician, and an astronomer, and his morbid view of rabies received a respectful hearing. It even, for a time, attracted a few admirers. But hope and habit were too strong, and within a generation the more congenial classic conception resumed its interrupted vogue.

Celsus's hydrotherapeutic regimen, adapted to the ducking stool, was commonly prescribed in cases of rabies throughout the sixteenth and seventeenth centuries, and at least on occasion (an essay by Oliver Goldsmith, written around 1765, refers to "a little boy bit in the leg, and gone down to be dipped in the salt water") during much of the eighteenth century. His pharmacological influence continued even longer. In 1806, the New York State Legislature passed, without recorded opposition, a bill entitled "An Act for Granting a Compensation to John M. Crous, for Discovering and Publishing a Cure for the Canine Madness." Crous's cure, for which he was granted a thousand dollars, was a tablet to be swallowed with water. Its components included the pulverized jawbone of a dog, the dried false-tongue of a newly foaled colt, and a pinch of corroded copper taken from an English penny minted in the reign of George I. Other American physicians of that time, perhaps less impressed by royalty, favored a remedy composed of bole armeniac, alum, chalk, elecampane, and black pepper. They also had confidence, as did many European doctors, in the curative powers of concretions, similar to kidney stones, that are sometimes found in the intestines of deer, goats, and other herbivorous animals and that, because they were used as a specific in the treatment of rabies, became known as madstones. Such concretions being formed of mineral salts, are porous and somewhat absorbent. These qualities helped to support the belief that a madstone applied to a rabid wound would promptly extract the venom. "This afternoon called on by a man in Jeffersonville to apply the madstone to a little son bitten a day or two previous," an Indiana physician named John McCoy noted in his journal on June 9, 1848. "Rode thro' the rain and reached there about sunset. Induced to think the dog mad." In 1879, at an auction in Texas, a madstone

brought two hundred and fifty dollars. That would be the equivalent of about a thousand dollars today.

The supposition that rabies could be cured by some curious pill or poultice expired with the nineteenth century. The absolute lethality of the disease is now universally accepted. One reason for this abrupt resignation to reality is that the evidence assembled by modern medical science leaves no room for doubt. Another is that the truth is no longer unbearable. Since the eighteen-eighties, when Pasteur was inspired to adapt to rabies his epochal discovery that the pathogenic properties of a microorganism can be attenuated (by drying, or treatment with certain chemicals, and passage through a succession of laboratory animals) without affecting its capacity to generate protective antibodies, a reliable means of hobbling the disease has been everywhere at hand.

Pasteur conceived the idea of rabies prophylaxis in 1880. By the end of 1883, he and his associates at the Ecole Normale, in Paris, were able to produce a stable strain of suitably domesticated virus. This was followed by two series of experiments establishing beyond dispute that the strain was immunologically effective in dogs. The first of these was brought to a brilliant close in June, 1884, with a formal trial before a committee of scientists appointed by the French government. For this definitive test, Pasteur chose two previously vaccinated dogs, two untreated dogs, and two untreated rabbits. After being examined by the committee, the six animals were anesthetized and trephined. Each animal was then identically inoculated with a quantity of material drawn from the brain of a demonstrably rabid dog. When the operation was completed, the animals were separately confined, and all received the same post-operative care. Two weeks later, the four controls, or untreated animals, developed rabies, and died. The vaccinated dogs remained in normal health. The second series of experiments, though begun at about the same time, continued into the following year, and the results were equally emphatic. They showed that it was possible to immunize a dog against rabies not only before but, if the step was undertaken promptly, after exposure to the disease. Pasteur emerged from

this revolutionary triumph with a vision of one even more revolutionary. "What I aspire to [now] is the possibility of treating a man after a bite with no fear of accidents," he wrote in the spring of 1885. "... I have not yet dared to treat human beings after bites from rabid dogs. But the time is not far off."

The time, as it turned out, was only a few weeks off. Pasteur treated his first human patient on July 6, 1885. This now famous pioneer was a nine-year-old Alsatian boy named Joseph Meister. Two days before, while walking on a country road near his home, he had been attacked by a plainly rabid dog, knocked down, and bitten fourteen times. When Pasteur saw him, at the request of a family doctor, the boy was more dead than alive. In fact, Pasteur later recalled, it was only the apparent hopelessness of the case that induced him to attempt its treatment. The procedure he used was a freehand adaptation of the one he had developed in his most recent experiments with dogs, and it took ten days. During that time, the boy received thirteen inoculations, of increasingly potent vaccine. His immediate reaction was encouraging, and it continued satisfactory throughout the treatment. At the end of a month, his wounds having healed, he seemed to be fully recovered. He was. Joseph Meister lived to be sixty-four. He died in 1940, a suicide.

The rehabilitation of Joseph Meister, which Pasteur described in a paper entitled "*Méthode pour Prévenir la Rage Après Morsure*" and presented at a meeting of the Académie des Sciences on October 26, 1885, created an instant and appreciative stir throughout the medical world. "[Rabies], that dread disease against which all therapeutic measures had hitherto failed, has at last found a remedy," the formidable neuropathologist Edmé - Félix - Alfred Vulpian proclaimed. Assisted by this and other resounding testimonials, the Pasteur treatment, as the procedure came to be called, was in international use within a decade, and it has since been administered many thousands of times, with sufficient success to establish its worth as a reliable defensive tool. Or so it is generally assumed. To what extent the Pasteur treatment protects human beings against the development of ra-

bies, however, is not known, and probably (in view of the natural scarcity of volunteers available for a series of controlled experiments) never will be. Its powers, in any event, are somewhat less than total. In a recent monograph, Harald N. Johnson, a staff member of the Rockefeller Foundation, observes, "On the basis of clinical evidence, there seems to be no doubt that rabies vaccine is effective in preventing the disease in the majority of the instances in which there is an expected incubation period of more than one month." But such an incubation period can only be expected in cases involving bites on the arms, legs, or torso. The chances that the Pasteur treatment will prevent the development of the disease when the victim is bitten severely on the head or neck are slight.

Only one more or less controlled test of rabies immunization in human beings has even been made. That was conducted by a World Health Organization team in 1954, in Iran. Its purpose was to evaluate an anti-rabies serum developed that year by Hilary Koprowski, assistant director of viral and rickettsial research at the Lederle Laboratories of the American Cyanamid Company. Serum differs from vaccine in that it contains—rather than merely stimulates the body to produce—the immunizing agents known as antibodies. A rabid wolf had burst into a mountain village, not far from the W.H.O. team's station, and bitten twenty-nine men, women, and children. As a matter of course, the Pasteur treatment was prescribed at once for all the victims. In addition, seventeen of the group, whose wounds included bites on the head or neck, were given immediate injections of serum. Eleven of them received one injection, the others two or more. The results were unmistakably clear. Twenty-five of the victims, including all who had received at least two injections of serum, survived. Of the four who died, three had been given only the Pasteur treatment, and the other a single serum inoculation. The limited efficacy of the Pasteur treatment is not, unfortunately, its only flaw. It has others. It is unpleasantly long (the present regimen, even when supplemented by serum, requires from fourteen to twenty-one days), it is usually expensive (the average injection costs about five dol-

lars), and, above all, it is disturbingly dangerous. Reactions to anti-rabies treatment range from those common in allergic conditions—erythematous or urticarial rashes, edema, syncope—to one known as neuro-paralytic accident. Neuroparalytic accident varies in degree from a polyneuritis to ascending encephalomyelitis. The latter, in an uncomfortable number of cases, is permanently incapacitating, and sometimes fatal.

The imperfections of the Pasteur treatment are not, of course, sufficient to deny it a place in the modern medical kit. There is, after all, nothing with which to replace it. In the opinion of most investigators, however, the imperfections are pronounced enough to discourage its use in any but cases of certain—or suspicious but unverifiable—exposure. It is also their urgent conviction that post-exposure prophylaxis is, at best, an indirect defense against the menace of rabies. "There can be no question that the ultimate solution to the rabies problem is predicated on the control and eventual elimination of the disease from animal populations," the *American Journal of Public Health* commented editorially in May, 1955. "This may be accomplished by the setting up of transmission barriers, such as animal immunization, elimination of stray dogs, and the reduction of excessive numbers of wildlife vectors." It has been accomplished in a considerable number of countries. Britain, where a system of controls, rigidly enforced by the Ministry of Agriculture and Fisheries, was established around 1900, is perhaps the most notable of these. The last human exposure to rabies in England occurred nearly fifty years ago, and except for a handful of cases among imported dogs held in quarantine, there have been no outbreaks among animals there since shortly after the First World War. The Scandinavian countries—Denmark, Sweden, and Norway—have, by similar exertions, achieved almost as admirable a record, and so, among others, have Australia, New Zealand, and Malaya.

The record of the United States, despite the existence of an elaborate apparatus of legislative controls, is less imposing. Except for Hawaii, where rabies has somehow never gained a foothold, few parts of this

country are wholly free of the disease. Last year, around half a million Americans were treated for bites inflicted by animals. Of these, sixty thousand were judged to have been exposed to rabies and received the Pasteur treatment. Three of them died. There were nine additional fatalities among persons who received incomplete or no treatment. The lowest incidence of human rabies in recent years was ten cases, in 1949. The highest was fifty-six cases, in 1944. Among domestic animals the average annual mortality is between seven and eight thousand. The persistence of rabies in man and beast throughout the United States has been variously explained, but two factors are considered decisive. One of these is indifference. Although many states have laws that specify a certificate of vaccination as a prerequisite for obtaining a dog license, and although all make some provision for the disposal of strays, such measures are seldom enforced, and then only in moments of epidemic panic. The other is the still enormous number of wild animals among which the rabies organism is endlessly perpetuated. This indigenous reservoir includes not only such conspicuous vectors as the fox and the skunk but badgers, raccoons, beavers, squirrels, and, since the early nineteen-fifties, the insectivorous bat.

The full significance of the bat attacks on Frances Roberts, Carl Dayton, David Bonner, and Mabel Tate has yet to be determined. One thing, however, seems certain. These four people were not the victims of a fleeting freak of nature. Their experiences have since been duplicated elsewhere in the country. Three more attacks by rabid bats were reported in 1954. All occurred in Texas—the first, early in April, in San Antonio, and the second and third, in May and July, near Austin. The victims were a youth of twenty and two small children. Another was reported in October, 1955, in Madera, California, and involved a middle-aged man. Last year, two more attacks—one certain and the other probable—we added to the record. The victims of these were a soldier on maneuvers in Louisiana and a Texas State Health Department field epidemiologist named George C. Menzies. Dr. Menzies, at the time of his exposure, had been collecting specimens of cave-dwelling bats in central

Texas to be examined for evidence of rabies infection. How and when he was exposed is not known. It is only known that he returned to his home, in Austin, on January 1st, and the following morning developed symptoms of rabies. Two days later he was dead. The five other victims received the Pasteur treatment and survived.

Dr. Menzies' last assignment was one of a number of similar studies that have been undertaken in collaboration with the United States Public Health Service since the Bonner episode in 1953. The investigation, which was understandably intensified by the harrowing discovery at Carlsbad Caverns two years later, is expected to continue for at least another year. Some months will then be required to accurately assess its results. The preliminary findings, however, have been tentatively correlated by Ernest S. Tierkel, chief of rabies Control Activities at the service's Communicable Disease Center, in Atlanta, and they are hardly reassuring. "During the last eighteen months or so, various field units have bagged in the neighborhood of ten thousand bats, in fifteen different states," Dr. Tierkel says. "About a hundred and fifty of them were positive for rabies. The group included four species of tree-living, or solitary, bats and eight species of cave dwellers, or colonials. All, of course, insectivorous. Every state in which we've made a thorough study has yielded its quota of positives. The list, at the moment, is Alabama, California, Florida, Georgia, Louisiana, Michigan, Minnesota, Montana, New Mexico, New York, Ohio, Oklahoma, Pennsylvania, Texas, and Utah. Those are the facts that we have to work with. What they mean—their epidemiological significance—is what we hope to find out.

In the early phases of our investigation, one possible conjecture was that what we

were turning up wasn't really rabies. We thought it might be a new virus disease of bats so closely related antigenically to the rabies virus that the two couldn't be differentiated by the usual laboratory tests. But a little more laboratory work disposed of that possibility. The disease is definitely rabies. Another basic question is whether the disease has always been present in the insectivorous bats of the United States and we have only just discovered it, or whether it represents a recent northward invasion into this country from the vampire-bat-rabies areas in Latin America. I'm inclined to suspect that the latter is the answer. We know, at any rate, that the Mexican free-tails of our Southwest migrate deep into the vampire country of Mexico. According to some authorities, the vampires and the free-tails even share the same winter caves. We hope that's all they share. If it turns out, as some preliminary findings have suggested, that our bats also share the vampires' resistance to rabies, we're up against an extremely difficult problem. Vampires—some of them, at least—are known to be capable of transmitting the disease for long periods of time without showing any signs of illness themselves. In other words, they're like Typhoid Mary. They're true carriers. If our bats have that capacity, if we find that they sometimes attack simply because they're frightened and not because they've been driven into a frenzy by the disease, and if we also find that the bat represents an important reservoir of rabies in the United States . . . Well, those are only possibilities, of course. We don't have the data yet to even hazard an answer. But what if they're shown to be facts? I think it would be a very good idea to tighten up our system of rabies controls."—*Berton Roueché*

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SEARLE

PRESIDENT'S LETTER



The annual meeting at Tulsa is now past history but its accomplishments still are being discussed. The scientific program was most excellent and reflected not only excellent planning but a lot of hard work on the part of the program chairman. It goes without saying that the high attendance was an indication of the excellent planning of the meeting.

The Oklahoma State Medical Association meets once a year and should be attended by all of its members. The meeting will have that attendance and interest that its programs and activities engender. At the next annual meeting I should like to see the registration exceed one thousand members.

Vacation time is at hand. Many of our members will be taking trips far and near. Wherever they may find themselves they are still Doctors of Medicine. They should, not only be able, but should be prepared to render efficient and valuable first aid in any emergency. I sincerely urge you irrespective of your classification to equip yourselves with a bag packed for emergencies and when the occasion arises, USE IT.

John Black Burton, M.D.
President

Association Activities

'Cavalcade of Health' Proves Popular in Oklahoma's Semi-Centennial Exposition

The "Cavalcade of Health" proved to be one of the most interesting highlights of Oklahoma's Semi-Centennial Exposition which opened at the Oklahoma City Fair Grounds on June 14. Over one million persons are expected to go through the gates at the Exposition before the closing date of July 7, 1957.

The health education show, which was the brain child of the Oklahoma State Medical Association, consists of non-commercial exhibits prepared by voluntary health agencies, related medical organizations, official state agencies, pharmaceutical manufacturers, insurance associations, and other lay groups who are interested in promoting better health for Oklahoma.

'Juno' Stars

One of the biggest attractions of the show is "Juno," the Plastic Lady. This transparent figure clearly indicates the systems of the human female body. Principal internal organs of the figure illuminate in synchronization as the simulated voice of the figure explains the function of each. The electronically controlled exhibit was constructed in Germany at the cost of \$50,000 and was loaned to the Association by its owner, the Dominican Republic.

However, Juno is only one of many displays in the Cavalcade of Health, one of the nation's greatest health education shows. Also being shown is an atomic reactor and a display of "Indian Medicine."

The American Medical Association has several displays among which is the interesting "Mechanical Quakery" exhibit. Here viewers see various machines, scientifically proven worthless, which sly promoters have sold the public as "sure-fire cure alls."

Another dramatic display is the "Life Begins" series which tells the story of human reproduction. Other A.M.A. exhibits are

"We See," "We Hear," and "Food, Facts, and Falacies."

Fifty years of medical progress are reflected in such comparative displays as physicians' offices of 1907 and 1957 and model laboratories pointing up today's complex practice of medicine as compared with early days.

Other exhibitors are:

Oklahoma Hospital Association, Oklahoma State Nurses Association, E. R. Squibb & Sons, Cerebral Palsy Institute, Oklahoma Medical Research Foundation, University of Oklahoma School of Medicine and Veterans Administration Hospital, University of Oklahoma Medical Center, American Foundation for Allergic Diseases, Oklahoma State Dental Association, American Medical Association, Smith, Kline and French Laboratories, Oklahoma Dietetic Association, Oklahoma City Dairy Industry, American Dairy Association, National Dairy Council, Committee on Diabetes, Insurance Industry, Oklahoma State Heart Association, Oklahoma Chapter of the American Cancer Society, Samuel Roberts Noble Foundation, Inc., Oklahoma State Veterinarians Association, Rehabilitation Agencies, National Society for Prevention of Blindness, Delta Gamma Sorority, Oklahoma Association of Pathologists, Oklahoma Society of Internal Medicine, Oklahoma County Pharmaceutical Association, Oklahoma State Department of Health, Oklahoma Alcoholism Association, Oklahoma Chapter of the Arthritis and Rheumatism Foundation, Oklahoma Dispensing Opticians Association, Oklahoma Tuberculosis Association, National Foundation for Infantile Paralysis, Oklahoma State Department of Mental Health, Oklahoma Association for Mental Health, Ciba Pharmaceutical Products, Inc., Blue Cross-Blue Shield Plans.

In addition to these exhibitors, the Oklahoma County Medical Society made a substantial financial contribution toward the promotion of the show.

These exhibits are housed in a building leased for the occasion by the Association and containing 20,000 square feet of floor space. There is no admission charge.

Cavalcade of Health Committee

The Cavalcade of Health was approved by the O.S.M.A.'s Council in January.

(Continued on Page 299)

Atomic Reactor Feature Of 'Cavalcade of Health'

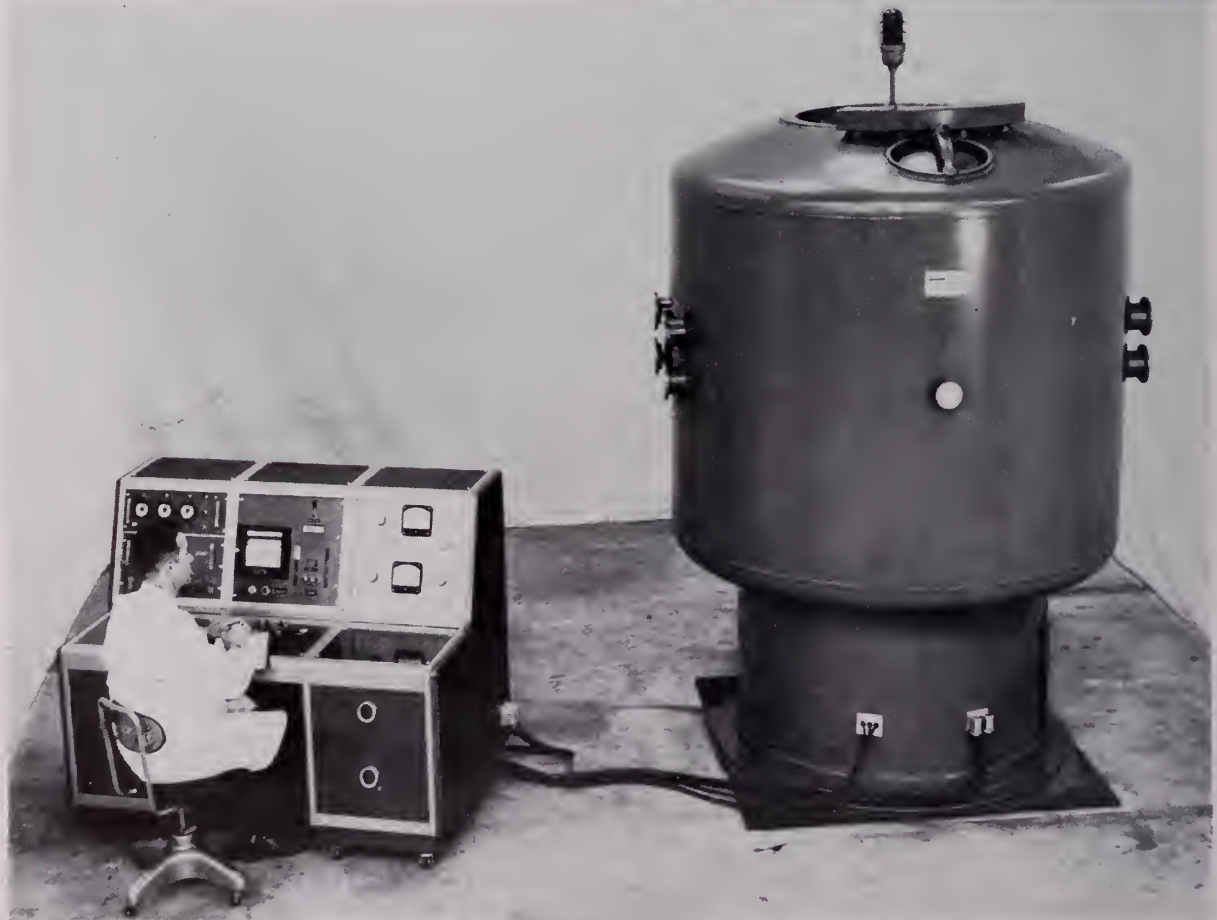
Pictured below is the Atomic Reactor, built by the Aerojet-General Nucleonics Company, San Ramon, California.

This Reactor, known as the AGN 201, has been supplied to the Oklahoma State University at Stillwater by the Atomic Energy Commission. The University is allowing the Oklahoma State Medical Association to display it as a feature of the "Cavalcade of Health."

This display will mark the first time it has been shown to the public anywhere in the United States in 1957.

The first customer for the unique "Mass Produced" Research and Training Reactor was the U. S. Naval and Postgraduate School in Monterey, California.

The picture on the right shows the Atomic Reactor being moved into the building. The AGN 201 can be moved completely and placed in operation in less than 36 hours.



New Doctor Draft Law Proposed in Congress

To replace the special doctor draft act that will expire June 30, the House Armed Service Committee on May 8 approved an amendment to the regular draft act. It was drawn up by the committee staff and differs from the bill (H.R. 6548) offered by Defense Department. Early action by the House is anticipated. The bill would:

1. Authorize the special call-up of physicians, dentists, and allied specialists through age 35 if they have had educational deferments; they would be drafted as members of their professions, rather than by age groups, as is the case with other draft registrants.

2. Continue the National, State and Local Medical Advisory Committees to Selective Service System; in its bill Defense Department did not ask to have the committees continued, explaining that this was a Selective Service matter and Selective Service had not requested they be retained.

3. Continue several provisions that were in the special doctor draft act, but not in the department's bill, including: right of doctors to volunteer for and be commissioned at an early date, right of doctors to resign their commissions after 12 months or more of active duty, provision for use of alien physicians in the military services.

Testifying on the bill were representatives of the American Medical Association, American Dental Association, the Association of American Medical Colleges, the National Medical Veterans Society, and the American Optometric Association.

Although heart and circulatory disorders cause more deaths than all other diseases combined, great progress has been made against certain forms of heart disease, according to Health Information Foundation. Thanks to new methods of fighting rheumatic fever and rheumatic heart disease, for example, the number of heart disease deaths among children 1-14 has decreased by 95 percent since 1900.

Southwestern Surgical Conference Attended by 41 Oklahomans

Forty-one Oklahoma physicians were among the 265 who registered for the annual meeting of the Southwestern Surgical Congress held April 15, 16, 17 in Wichita, Kans.

Papers presented by Oklahoma physicians were: "A New Approach to Radical Left Colectomy—A Preliminary Report" by George M. Brown, M.D., of McAlester; "Current Concepts of Treatment of Peripheral Vascular Occlusive Diseases" by Austin H. Bell, M.D., and Edward R. Munnell, M.D., Oklahoma City presented by Doctor Munnell; and "Medical and Surgical Problems in the High Andean Native" by John A. Schilling, M.D., also of Oklahoma City.

Highlighting the entertainment for the meeting was a banquet at the Petroleum Club with musical numbers by the Kiwanis Club Glee Club, a group of businessmen who go all over the country entertaining as a hobby.

On Tuesday evening, the convention members were entertained at a dinner held in the Boeing Airplane Plant cafeteria, the largest cafeteria in the world. After dinner, the group was taken on a tour of the giant plant.

At the business session, plans were laid for a new Essay Contest with cash prizes on scientific research and study. The contest is open to anyone in the ten state area.

Officers elected at the session were: Lewis M. Overton, M.D., Albuquerque, New Mexico, President; Lee W. Storey, M.D., Laramie, Wyoming, Vice-President; and Edgar J. Poth, M.D., Galveston, Texas, Publications Representative.

Heart disease is apparently more prevalent among women than men, Health Information Foundation points out—but it causes 75 per cent more deaths among the males in this country. One possible explanation of the excess male mortality: Men are thought to be particularly subject and vulnerable to the strains and pressures of modern life.

Highlights of the OSMA 51st Annual Meeting

NEW ATTENDANCE RECORD SET FOR A TULSA MEETING

Attendance at the Oklahoma State Medical Association's Semi-Centennial annual meeting broke all previous records for a meeting held in Tulsa when 771 physicians registered for the three-day convention held in the Mayo hotel on May 6-7-8, 1957.

COUNCIL MEETS FOR PRE-CONVENTION SESSION

The Council of the O.S.M.A. held a pre-convention meeting on Saturday, May 4, in the Ivory room of the Mayo. The business session which began at 7:00 p.m. lasted until after midnight. The recommendations on Association policy formulated by the group were later presented to the House of Delegates for consideration.

HOUSE OF DELEGATES CONVENES ON SUNDAY

The meeting of the House of Delegates get underway at 1:00 p.m. on Sunday, May 5, as more than ninety delegates and alternate delegates registered.

The proceedings of the opening session are published in full in this issue of the *Journal*; the closing session will appear in the July issue. Following are some of the high points of both sessions.

David B. Allman, M.D., Atlantic City, New Jersey, President-Elect of the American Medical Association, addressed the House on "Health Alone Is Victory."

The House approved resolutions recommending appointment of a doctor of medicine to the state board of regents and going on record against Social Security coverage of physicians. The group passed a resolution concurring with one proposed by the Oklahoma County Medical Society in regard to Veterans Administration hospit-

als. The resolution recommended that an admission committee for each Veterans Administration hospital be established to carefully screen cases in order to exclude all Workmen's Compensation cases and non-service connected cases with private insurance company coverage and non-service connected cases able to pay for private care.

The House voted affirmatively on the resolution providing that a newsletter be published during each session of the legislature to keep members of the Association informed as to legislation regarding the practice of medicine.

A change in the By-Laws of the Association made the Editor of the *Journal* and the two immediate past presidents members of the Council. The past presidents will be members for the two years following their retirement from office. Under this change, H. M. McClure, M.D., will serve on the Council two years and R. Q. Goodwin, M.D., will serve one year.

Also on the roster for the closing session which convened at 7:00 p.m. and lasted until 1:00 a.m. was the election of officers. Voted President-Elect for 1958-59 was E. C. Mohler, Ponca City. Doctor Mohler is a graduate of Northwestern University School of Medicine and is a member of the American College of Surgeons. He has been in practice in Ponca City for 20 years.

Other officers elected were: Alpha Johnson, M.D., El Reno, Vice-President; Johnny A. Blue, M.D., Oklahoma City, Secretary-Treasurer; Malcom E. Phelps, M.D., El Reno, Delegate to the American Medical Association and Rufus Goodwin, M.D., Oklahoma City, Alternate Delegate.

Councilors and Vice-Councilors elected were: District 2—Powell Fry, M.D., Councilor, Stillwater; J. W. Murphree, M.D.,



THE HOUSE OF DELEGATES convened for the opening session at 1:00 p.m. on Sunday when reports from committees functioning during the year gave their reports. The delegates and alternate delegates met again at seven o'clock in the evening to elect officers, pass resolutions establishing policies, and to conclude other business of the Association.

Vice-Councilor, Ponca City; District 5—Ross Deputy, M.D., Councilor, Clinton; C. Riley Strong, M.D., Vice-Councilor, El Reno; District 7—E. K. Norfleet, M.D., Vice-Councilor, Bristow; District 8—Wendell L. Smith, M.D., Councilor, Tulsa; Marshall O. Hart, Vice-Councilor, Tulsa; District 9—R. L. Currie, M.D., Vice-Councilor, Sallisaw; District 11—Thomas E. Rhea, M.D., Councilor, Idabel; W. A. Hyde, M.D., Vice-Councilor, Durant; and District 14—J. B. Hollis, M.D., Councilor, Mangum; R. R. Hannas, M.D., Vice-Councilor, Sentinel.

SCIENTIFIC PROGRAM OPENS ON MONDAY

Two sessions were meeting simultaneously during the scientific programs which got underway on Monday morning. The morn-

ing sessions were divided between the general session where papers were read and the group viewing medical motion pictures.

The groups merged for Roundtable Luncheons held on both Monday and Tuesday in the Pompeian Room of the Mayo. Members were given the opportunity to ask questions of the visiting distinguished guest speakers following the luncheons.

Nationally known physicians who appeared as guest speakers were: Claude S. Beck, Cleveland, Ohio; John W. Gofman, Berkeley, California; William Dameshek, Boston, Massachusetts; Paul C. Swenson, Philadelphia, Pennsylvania; Robert A. Cosgrove, Jersey City, New Jersey; Russell J. Blattner, and Michael K. O'Heeron, Houston, Texas; George C. Griffith, Los Angeles, California; Eric Oldberg, Chicago, Illinois;



REGISTRATION for the Semi-Centennial Annual Meeting of the Oklahoma State Medical Association got under way at 8:00 a.m. on Monday in the lobby of the Mayo.



ROBERT H. JOHNSON, M.D., of Tulsa shows his wood carving of the Virgin Mary. Doctor Johnson one of twenty-three exhibitors at this year's Hobby Show.



WALTER E. BROWN, M.D., of Tulsa introduces the entertainer for the banquet. Doctor Brown was Convention Chairman for the 1957 Annual Meeting.

and John S. Lundy, Rochester, Minnesota. Submitting a paper, but unable to appear personally, was I. Phillips Frohman, M.D., Washington, D. C.

CLOSED CIRCUIT TV HIGHLIGHTS MONDAY AFTERNOON SESSIONS

One of the highlights of Monday's program was an unprecedented closed circuit television program originating in Chicago. Entitled "The Physician and Emotional Disturbance," the video clinic was planned to give the physician advice in recognizing emotional disturbances as possible backgrounds for physical ailments.

The Oklahoma physicians joined those in four other states in viewing the unusual presentation which was projected on a 9 by 12 foot screen.

To make the program a true seminar, a moderator in each city where the conventions were being held was in direct communication with the panel in Chicago so that questions from the audience could be answered by two-way audio hookup. Doctor Joe E. Tyler served as moderator for the Oklahoma group.

SHORE DINNER CAPS OPENING DAY'S ACTIVITIES

Capping the opening day's activities was a complimentary seashore dinner given by Blue Cross-Blue Shield plans in their cafeteria. Physicians and their wives were guests at the dinner served by the Louisiane, one of Tulsa's finer seafoods restaurants.

22 ATTEND PAST PRESIDENTS' BREAKFAST

Nineteen Past Presidents of the Association, the President, and two who were President-Elect attended the Annual Past Presidents' Breakfast held Tuesday morning, May 7, 1957, at 8:00 a.m. at the Mayo. The former presidents and special visitors



INSTALLED AS PRESIDENT of the Oklahoma State Medical Association was John Flack Burton, M.D., (right) of Oklahoma City. H. M. McClure, M.D., (left) out-going president from Chickasha installed Doctor Burton at ceremonies which highlighted Tuesday evening's banquet.

were guests of the Blue Cross-Blue Shield Plans.

Shep Fields and his Rippling Rhythm Orchestra.

JOHN F. BURTON, M.D., INSTALLED AS PRESIDENT

John Flack Burton, M.D., of Oklahoma City was installed as President of the Oklahoma State Medical Association at ceremonies highlighting Tuesday evening's banquet and ball. Out-going President H. M. McClure, M.D., Chickasha, installed the new president. The banquet, held in the Crystal Ballroom of the Mayo, was followed by a gala President's Ball in the Cimarron Ballroom. Music for dancing was provided by

ANNUAL GOLF TOURNAMENT HELD AT TULSA COUNTRY CLUB

Climaxing the meeting was the Annual Doctors' Golf Tournament and buffet dinner held Wednesday afternoon and evening. The event, sponsored by Pfizer Laboratories, was held at the Tulsa Country Club. Winner of the tournament was Franklin D. Sinclair, M.D., of Tulsa. The first two runners-up, also from Tulsa, were E. Malcolm Stokes, M.D., and William Benzing, Jr., M.D.



PAST PRESIDENTS' BREAKFAST—The Past Presidents' Breakfast, compliments of the Oklahoma Blue Cross-Blue Shield plans, was held Tuesday morning in the Mayo. Special guests for the occasion were John F. Burton, M.D., President-Elect for 1957-58; H. M. McClure, M.D., President; and E. C. Mohler, M.D., President-Elect for 1958-59. Physicians pictured are: (standing, left to right) John F. Burton, President-Elect, Oklahoma City; Henry K. Speed, 1938-39, Sayre; Sam A. McKeel, 1937-38, Ada; H. M. McClure, President, Chickasha; Leonard S. Willour, 1918-19, McAlester; P. P. Nesbitt, 1925-26, Tulsa; John E. Mc-

Donald, 1953-54, Tulsa; Paul P. Champlin, 1947-48, Enid; Alfred R. Sugg, 1952-53, Ada; Arthur S. Risser, 1926-27, Blackwell; L. Chester McHenry, 1951-52, Oklahoma City; C. E. Northcutt, 1948-49, Ponca City; E. C. Mohler, President-Elect for 1958-59; Ralph A. McGill, 1950-51, Tulsa; George H. Garrison, 1949-50, Oklahoma City; R. Q. Goodwin, 1955-56, Oklahoma City; Walter A. Howard, 1939-40, Chelsea. Seated are, left to right, Everett S. Lain, 1924-25, Oklahoma City; W. Albert Cook, 1917-18, Tulsa; Finis W. Ewing, 1941-42, Muskogee; T. H. McCarley, 1933-34, McAlester; J. Hutchins White, 1915-16, Muskogee.



ROUNDTABLE LUNCHEONS were scheduled for both Monday and Tuesday in the Pomperian Room of the Mayo. The luncheons were folowed by an informal question and answer period enabling physicians to discuss pertinent medical subjects with the visiting guest speakers.

Annual Doctor's Hobby Show Reveals Variety of Pastimes

One the most interesting features of the 51st Annual Meeting of the Oklahoma State Medical Association was the Doctors' Hobby Show sponsored by the Woman's Auxiliary to the Oklahoma State Medical Association and coordinated by Mrs. W. R. R. Loney of Tulsa, state chairman of the project.

Oil painting proved to be one of the most popular hobbies among the 23 entrants. Doctors exhibiting in this category were: Dan Perry, Gifford Henry, Carl Lindstrom, Hershel Rubin, all of Tulsa. Others were P. E. Russo, M.D., Oklahoma City; L. Gordon Livingston, M.D., Cordell, and Evelyn Miller, M.D., Muskogee, who displayed the painting that will go to the American Medical Association's 20th Physician's Art Show in New York.

Dale Newman, M.D., entered two pieces of copper tooling, wrought iron candle holders and three ceramic ash trays. W. R. R. Loney, M.D., showed examples of his needle-point handwork with three chair coverings and a lady's purse.

Tulsa physicians whose interests were in photography were: William H. Henderson, who had two enlarged colored photographs; Lester Nienhuis, who showed a photo mural hand-painted in oil; and Joseph Fulcher who had five color photographs and a table and lamp of walnut which he had built.

Robert Hall Johnson, M.D., of Tulsa, sculptored a head of Lincoln and a statuette of St. Francis of Assissi in limestone. In addition, he displayed a mahogany wood carving of the Virgin Mary. Also interested in sculptoring is Doctor Dave Edwards of Tulsa who displayed a sculptored head of his wife along with a mahogany jewel box he had made.

Unique in the show was the hobby of Charles E. Brighton, M.D., who is a collector of cuckoo clocks. Doctor Brighton displayed a transparent plastic model which he had constructed to show the works of these clocks and a 150 year old clock of cherry wood with all wooden works.

Doctor George Krietmeyer of Tulsa contributed an OH gauge model train which he himself had constructed. Songwriter David Shapiro, M.D., of Tulsa displayed seven rec-



OIL PAINTING proved one of the most popular hobbies at the Annual Physicians' Hobby Show sponsored by the Auxiliary to the Oklahoma State Medical Association. Looking over the exhibits is Joe L. Duer, M.D., Woodward.

ords and music to songs which he has written.

Leon Stuart, M.D., Tulsa, had on display a photographic "first" in astronomy which is his hobby. Doctor Stuart photographed for the first time a meteortic impact on the moon.

W. O. Smith, M.D., Oklahoma City, displayed fifteen photographs of winning race horses which he had bred and trained. Doctor Robert Imler of Tulsa breeds and trains Shetland ponies; he displayed photographs of five of his favorites.

Amateur golfer Malcom Stokes, M.D., Tulsa, showed six trophies he has won. Roscoe Baker, M.D., Enid, gave his definition of "hobby" and showed four of the many bulletins he has edited free of charge for his county the past 22 years.

E. O. Johnson, M.D., represented the rose growers in Tulsa. He exhibited a number of his ribbons and the Silver Showman Rose Bowl donated by Doctor W. A. Showman of Tulsa and awarded to the member of the Men's Rose Growers Club who has the most blue ribbons at their annual rose show.

Have You Heard?

W. A. HOWARD, M.D., pioneer Chelsea physician and president of the Rogers-Mayes Medical Society, attended the fiftieth anniversary reunion of his graduating class at the old St. Louis College Physicians and Surgeons held May 3 at the Sheraton-Jefferson Hotel in St. Louis.

HASKELL NEWMAN, M. D. underwent an emergency appendectomy at the Shattuck hospital on May 6.

JACK C. MILEHAM, M.D., underwent surgery in the Mileham hospital, Chandler, in April.

CHARLES A. CASHMAN, M.D., has moved his practice to the Whitney Clinic in Okemah. Doctor Cashman formerly lived in Shidler.

HARVEY ELKOURI, M.D., Anadarko, has reported for active duty in Montgomery, Alabama, with the Air Force.

ELIZABETH FLEMING, M.D., Director of the Choctaw county department of public health was one of four Hugo citizens who received "Citizen of the Year" awards from the Hugo Daily News for the year 1956.

ARVIN C. ROBERSON, M.D., of Anadarko, reported May 5 to active duty with the Strategic Air Command, Barskdale Field, Shreveport, Louisiana.

J. W. CHILDS, M.D., retired Tulsa physician and surgeon, was honored May 19 for his 31 years as a rose grower at the annual rose show sponsored by the Men's Rose Club of Tulsa.

H. K. SPEED, M.D., pioneer doctor, was honored by the city of Sayre in observance of his fifty years of continuous service when June 3 was declared "Speed Day."

EVERETT L. WIGGINS, M.D., has established an office in Anadarko; he was formerly of Weleetka.

EDWARD K. NORFLEET, M.D., has moved to Bristow where he took over the practice of R. L. BAKKEN, M.D., who recently moved to Battle Creek, Michigan. Doctor Norfleet and his family were formerly of Sapulpa.

CLASSIFIED ADS

OFFICE SPACE for lease. Ten rooms, two lavatories, private parking, air conditioned, ground floor. Will rent half or lease all. 1225 North Walker or call FOrrest 5-4842 or TR 8-3311.

FOR SALE: Complete office equipment and furniture, including x-ray and bucky (2 yr. old) for General Practitioner. May be bought on easy terms. Excellent opportunity for practice in town of 4,500. Long term lease on desirable office space available at low rent. If interested write for complete invoice of equipment, and details of opening for practice. R. O. Smith, M.D., 306 N. Willow, Fayetteville, Arkansas.

FOR SALE: Physician's instruments and office equipment. Mrs. Melvin Fry, 2007 S.W. 15, Oklahoma City, Okla. Phone CENTral 2-9284.

FOR RENT: Office space with dentist and pediatrician. 2548 N.W. 23, Oklahoma City. Telephone WI 2-5969.

WILL BUILD TO SUIT PHYSICIAN. Plan your own office in building to be shared with Oklahoma City dentist. Choice location, 827 N.W. 10th. For details call CE 2-0000.

GENERAL PRACTICE OPPORTUNITY: Stuart, Oklahoma; to serve trade area of 1,500; partially equipped office available; good church town, new school; contact Robert Lee Nunn, Postmaster.

WANTED—Associate for active General Practice in Oklahoma City area. Guarantee plus percentage and partnership after first year if mutually satisfactory. Give full details in first letter. Write Box A, c/o Oklahoma State Medical Association, Box 9696, Shartel Station, Oklahoma City, Oklahoma.

AVAILABLE: Substantial practice in General Medicine in a community of approximately 1800 five miles from a metropolitan center with excellent hospital facilities. Price very reasonable. Write Box K, c/o THE JOURNAL, P. O. Box 9696, Shartel Station, Oklahoma City, Oklahoma.

FOR LEASE: 440 square feet of office space adjacent to pharmacy. Will remodel and decorate to suit needs of physician. Patient parking space available. Write Leon Nicholson, c/o Oklahoma City Pharmacy, 233 N.W. 13th, Oklahoma City; or call CENTral 2-3156 for details.

25 Years Ago . .



Articles published in *The Journal* of the Oklahoma State Medical Association June 1932. Edited by John G. Matt, M.D.

Some Recent High Points in Surgical Progress

Fred S. Watson, M.D., Okmulgee

" . . . When I began to practice surgery fifteen years ago, a fair history of a patient was taken; the heart and lungs were examined with the stethoscope; the urine was tested for albumin and sugar, and sediment observed through the microscope for casts. Today, tests of the blood, kidneys, liver and heart, with the liberal use of the X-ray make it possible to be much more accurate in our decisions as to operability, and to recognize diseases earlier while they are still curable. . . .

"In the treatment of burns great changes have taken place. The mortality rate has been decreased sixty-five per cent, the cost of hospitalization fifty per cent, and the disability seventy-five per cent, to say nothing of the relief of the suffering of these individuals. For example, it was my privilege to treat recently a second degree burn involving forty per cent of the man's body, and to have this patient out of the hospital with all surface healed in twenty-one days, and back at his regular work in six weeks. These results were obtained by the use of the newly perfected tannic acid jelly.

"Great changes have taken place in abdominal surgery. Early X-ray diagnosis and better preparation of patients has greatly increased the number of cures of cancer in the entire intestinal tract. Surgical treatment of gastric ulcer has grown more radical and that of duodenal ulcer has become more conservative. Surgery of the gall-bladder has undergone radical changes. Without disease of the common duct and the pancreas, the operation of choice is now cholecystectomy, and the cholecystotomy when these organs are involved. There is no place in surgery where more skillful surgical judgment is required than successfully operating upon the gall-bladder and the common duct.

"Womankind has been wonderfully blessed by conservative surgery of the ovaries, tubes, and uterus. Only a few years ago, numerous Caesarean sections were performed on the eclamptic patient. With the conservative treatment now used the mortality rate has decreased and the stormy post-operative period has been eliminated. The office use of the cautery to the eroded cervix has no doubt been of great benefit in preventing cancer in this area. The female organs are no longer operated for every complaint of backache. Instead, our orthopedists are now trained

in their methods of procedure to determine the shortened limbs, and curvatures and injuries of the spine, so that they may be corrected by proper shoes, braces, corsets, etc.

"Urologists have developed accurate methods of diagnosis and treatment until now they can bring relief to the vast number of persons who suffer from diseases of the genito-urinary tract.

"Conservative treatment by the dehydration method has saved the lives of many patients with fractured skulls and concussions, where formerly numerous operations would have been done. The early recognition of the signs and symptoms of brain tumor have permitted these patients to be operated on earlier and more successfully.

"In recent years we have been presented with numerous new types of anesthetics and methods of administering them; so that where ether seems inadvisable the operator can select the anesthetic suitable for each individual patient.

"Our hospitals have been improved by better nurses and by being equipped with clinical and X-ray laboratories.

"The span of life has been extended some twenty years in the last two decades. . . ."

Editorial Notes—Personal and General

GARFIELD COUNTY MEDICAL SOCIETY met May 3rd at Enid as guests of Dr. T. H. Hinson, and the Staff of the Enid Springs Hospital. Dr. Hugh Jeter and Francis E. Dill, Oklahoma City, presented "Arthritis."

OKLAHOMA CITY HEALTH PHYSICIANS have discovered another racket. Patients supposedly suffering from Pellagra have been using yeast, which was supplied them, for purposes other than treatment. It is not difficult to guess to what use the yeast was placed.

WOODS-ALFALFA COUNTY MEDICAL SOCIETY met at Alva, May 17th. The program "Undulant Fever" as presented by Dr. H. H. Turner, Oklahoma City, with slide illustrations; by Dr. J. W. Mercer, Cherokee. Dr. J. B. Eskridge, Oklahoma City, presented "Application of Forceps" and "Podalic Version."

OKLAHOMA STERILIZATION law will be tested before the Supreme Court if necessary according to Mr. Richard H. Cloyd, Norman attorney, who is opposing sterilization of Samuel W. Main, a patient confined at the State Hospital. The law itself provides that these cases be amply protected before any action is taken.

Disorders of the heart, blood vessels and related organs caused over 850,000 deaths last year—more than half the total number of deaths in this country, Health Information Foundation reports.

PHYSICIAN PLACEMENT

Anesthesio

Daniel B. Perry, Residence Quarters, Harlem Hospital, New York, N. Y., age 48, Meharry Medical College, 1948, interned at Harlem Hospital, New York and served residency in anesthesia there, veteran, available December, 1957.

General Practice

Louis Marshall Cuvillier, Jr., 1407 Woodside Parkway, Silver Spring, Maryland, age 44, married, George Washington University School of Medicine, 1938, interned at Garfield Memorial Hospital, Washington, D.C., one year residency in medicine and obstetrics at Norfolk General Hospital, Norfolk, Virginia. Veteran, available upon 90 day notice.

Orby L. Butcher, Jr., 3106 Alaska, Dallas, Texas, age 29, married, University of Oklahoma, 1955, now in surgical residency at VA Hospital in Dallas, Veteran. Available, July, 1957.

David L. Mossman, USAH, Orthopedic Department, Ft. Riley, Kansas, age 28, married, University of Vermont, 1954, available upon separation from service, December, 1957.

Robert R. Rupp, 1235 N. Lorraine, Wichita, Kansas, age 30, married, University of Oklahoma, 1956, internship at Wesley Hospital, Wichita, veteran, available, July 1, 1957.

Internal Medicine

Rensselaer, W. M. Clure, Mayo Foundation, Rochester, Minnesota, age 31, married, University of Kansas, 1948, veteran, available July 1, 1957.

James E. Morris, Jr., 1034 Second St., S.E., Moultrie, Georgia, age 26, married, University of Tennessee College of Medicine, 1953, one year internal medicine residency, now serving military obligation, available February, 1957.

Robert W. Datesman, 94 Oak Street, Westwood, Massachusetts, age 30, married, University of Pennsylvania, 1951, residency training at University of Minnesota Hospitals, and Boston Veteran Hospital, Veteran, available in July, 1957.

Joseph A. Ezzo, 3215 Nebraska, St. Louis 18, Missouri, age 32, married, St. Louis University, residency at St. Louis City Hospital and St. Louis University Hospitals, veteran, available, July 1, 1957.

Obstetrics-Gynecology

John P. Harrod, Jr., 932 E. 56th Street, Chicago 37, Illinois, age 33, married, University of Georgia, 1946, served residency at University Hospital, Augusta, Ga., Duval County Hospital, Jacksonville, Florida and at Chicago Lyons-In Hospital, Board certified, veteran, availability date unknown.

Bernard Martin Davis, Jr., 101 Turnbridge Rd., Baltimore 12, Maryland, age 31, married, Georgetown

University, 1951, 3 years residency at University Hospital, Baltimore, veteran, available, July 1, 1957.

Pediatrics

Robert W. Mosely, 211 Adams Street, Galax, Virginia, age 32, married, Medical College of Virginia, 1948, residency at Walter Reed Army Hospital, Board eligible, interested in private practice or public health, veteran, available April, 1957.

Surgery

Duane A. Barnett, 1636 N.E. 46th Street, Oklahoma City, age 30, married, University of Oklahoma, 1952, interned at Wesley Hospital, Oklahoma City, now in residency at Veteran's Administration Hospital, veteran, will be board eligible and available for practice July 1, 1957.

Aristides Cardona, 106 Sinis Rd., Syracuse, New York, age 30, married, State University of New York, 1951, Board eligible, wants additional residency, veteran, available, June, 1957.

Vernon L. Guynn, 2026 S. Second Ave., Maywood, Ill., age 32, married, University of Illinois, 1947, passed Part I of General Surgery Board, military obligation served, available January 1, 1957.

Alvin S. Natanson, 49 Kiernan Drive, Rantoul, Illinois, age 36, married, Tufts Medical College, 1949, residency training at Boston City Hospital, Diplomate of the American Board of Surgery, available upon separation from service, July, 1957.

James Firth Alexander, Charity Hospital, New Orleans, Louisiana, age 34, single, Ohio State, 1949, in orthopedic residency training now, veteran, available immediately.

Karl Edwin Blake, 2681 Crosby Avenue, Pittsburgh 16, Pa., age 33, married, University of Pittsburgh, 1948, residency at VA Hospital and Children's Hospital, Pittsburgh, Board Eligible, veteran, available May, 1957.

Urology

John C. Brazos, 406 South Washington, Watertown, Wisconsin, age 36, married, University of Illinois, 1949, interned at Anckee County Hospital, St. Paul, Minnesota, residency at Milwaukee County Hospital, Milwaukee, Wisconsin. Veteran, available upon completion of residency, July 31, 1957.

Paul Lucian Livingston, 18340 Lake Chabot Road, Castro Valley, California, age 35, married, New York Medical College, 1946, served residencies at Orange Memorial Hospital, New Jersey and at Veterans' Administration Hospital, Long Beach, California, now Assistant Chief Urologist at V.A. Hospital, Board Qualified, veteran, available upon sixty days notice.

Report From the Woman's Auxiliary to The Oklahoma State Medical Association

This speech was given before the House of Delegates on May 5, 1957, by Mrs. L. Gordon Livingston, President of the Oklahoma State Medical Auxiliary, 1956-57.

Mr. Speaker, President Doctor McClure, Members of the House of Delegates and Councilors:

On behalf of the State Medical Auxiliary, I would like to express our sincere thanks and appreciation to the Oklahoma State Medical Association for the furnished office space in your new building. To Doctor McClure, Dick Graham, Don Blair and their office staff for all the kind cooperation, advice and assistance to the Auxiliary this year. And Mr. Graham, it was most thoughtful and gracious of you to have the coffee and doughnut service for our members at our Fall Conference and Board Meeting last October. It was a most refreshing surprise to all and especially appreciated by those who drove in from all parts of the state to attend the meeting.

The Auxiliary has grown to a membership of 1101 members. Fifty-six are new members this year. Twenty-one organized auxiliaries with 45 counties represented.

We granted 14 student nurse loan funds, a total of \$1548.00. Contributions to our State Nurse Loan Fund this year from our county auxiliaries was over \$700.00. These loans are granted to the girls after they have passed their entrance examinations and been accepted in the school of nursing. The loans become due when they graduate and the interest begins then too.

We sent in \$846.00 to the American Medical Education Fund this year. Large donations were made to the Tulsa Medical Center and the Oklahoma Research Foundation by the Oklahoma County Auxiliary and Tulsa-Creek Auxiliary.

The large donations to our Loan Fund, the A.M.E.F. and other projects do not come out of our dues, except a small percent. Most of it is raised by special fund-raising projects of the individual county auxiliaries. This year, Tulsa-Creek county auxiliary

raised over \$400.00 and sent \$300.00 to the State Nurse Loan Fund, \$100.00 to the A.M.E.F. Book reviews, teas, horse shows, style shows and various means are promoted by the individual county auxiliaries to raise funds for our state and national projects.

Most of the County Auxiliaries contribute to the county health drives and many of the members work on the drives. Stephens County Auxiliary has done most outstanding work in mental health in the past two years. Our county auxiliaries collect clothing, books, magazines and many other useful articles from their auxiliaries and send to the mental hospitals. Hand puppets were made for all the children in one children's hospital by members of one auxiliary. Permanent gifts were bought and given to the County Farm for Old Folks in Oklahoma County and to a children's home in Tulsa County. Booths for Civil Defense and Public Health were staffed by the Auxiliary members at two State District Fairs. Another Auxiliary assisted their P.T.A. in making a Safety Survey of their County. Tulsa County gave a coffee honoring all the Dental Auxiliary members and Registered Pharmacists Auxiliary members. Oklahoma County gives an annual tea to all the graduating nurses of the City hospitals.

Our Doctors' Hobby Show has grown with enthusiasm and we hope that it will continue to inspire all our doctors to become interested in some creative hobby.

A new project was sponsored this year by some of the county auxiliaries: The Association of American Physician's and Surgeon's Essay Freedom Inc. The high school students have a choice of two subjects: "The Advantages of Private Medical Care" and/or "The Advantages of the American Free Enterprise System." The county winners were sent to National in Chicago. The winner from Washita County was invited to read her winning essay at a county Public Relations banquet and I asked to present her and explain the contest and how it was sponsored.

Our most outstanding accomplishment on

(Continued on Page 298)

WOMAN'S AUXILIARY REPORT

(Continued from Page 297)

the state level this year was accomplished through the state recruitment chairman, Mrs. C. M. Bassett. She planned and executed a state-wide Field Day for all the Future Nurse Clubs in Oklahoma, the first ever to be held in Oklahoma. This was a joint endeavor with the State Nurses' Association. Over 600 girls and their sponsors attended this meeting April 6 at the State Medical School. It was covered by the Associated Press, United Press and International News Service with stories and pictures. The Mayor of Tulsa and the president of the Tulsa Chamber of Commerce sent telegrams of congratulations and invited us to come to Tulsa with it next year.

A large percent of the Auxiliary members take the Secretary's Letter and Washington News Letter which are read and reported on in our meetings.

Mrs. George H. Garrison continues to bring honors to our State Auxiliary. Today she is in Philadelphia addressing the visiting wives of the Student American Medical Association on Organization of Student Medical Auxiliaries. May 15, she will represent our National President at the State Convention of New Mexico. Mrs. Garrison is a member of our National Board of Directors this year.

Our Student Medical Auxiliary has grown to over 280 members and are a most enthusiastic and interested group of young women.

The A.M.A. has said that "Today's Health" magazine is one of the doctor's best public relations, and our state auxiliary has sent in over seven hundred subscriptions this year. It cannot be bought on newsstands or in stores, only by subscription direct to National or through the Medical Auxiliaries.

Thank you for your time and attention, and good afternoon.

COMING MEETINGS

Annual Meeting of the OKLAHOMA STATE HEART ASSOCIATION June 15, 1957

801 N.E. 13th Oklahoma City, Okla.

Dr. Michael E. DeBakey, Professor and Head of the Department of Surgery at the Baylor University College of Medicine, Houston, Texas, will be the principal speaker for the Scientific Session. Doctor DeBakey will direct his attention to discussion and graphic films illustrating the "Changing Concepts in Aortic and Arterial Surgery."

The afternoon session has been planned to provide a resume and review of all the service available in the community and to the physician to "Stop Rheumatic Fever," the goal of the Association this year.

11th Annual Rocky Mountain CANCER CONFERENCE July 10 and 11, 1957 Denver, Colorado

SYMPOSIA ON THE STOMACH AND LUNG

Formal papers by Arthur T. Hertig, M.D., Richard H. Overhold, M.D., Alton A. Ochsner, M.D., and Joseph Bank, M.D.

SYMPOSIA ON CYTOLOGY

By Semour Farber, M.D., Joseph A. Cunningham, M.D., and Arthur T. Hertig, M.D.

GUEST SPEAKERS:

Joseph Bank, M.D., Internist, Phoenix, Arizona
Seymour Farber, M.D., Internist, San Francisco
Arthur T. Hertig, M.D., Ob-Gyn Pathologist, Boston
Joseph A. Cunningham, M.D., Pathologist, Birmingham, Alabama
L. Henry Garland, M.D., Radiologist, San Francisco
Alton A. Ochsner, M.D., Surgeon, New Orleans
Richard H. Overholt, M.D., Surgeon, Boston

UNIVERSITY OF OKLAHOMA SCHOOL OF MEDICINE

POSTGRADUATE COURSES—1956-1957 SHORT COURSE SERIES

3:30 to 8:30 p.m., Room 118, Medical School Afternoon and Evening Sessions

November 26-30—Arranged by the American College of Physicians

3,804 New Physicians Licensed During 1956

The physician population of the United States increased by 3,804 in 1956, according to the annual report on physician licensure by the American Medical Association's Council on Medical Education and Hospitals.

Actually 7,463 physicians received their first licenses to practice medicine and surgery in 1956. However, 3,659 physicians died during the year. Subtracting this number from the number licensed for the first time leaves a gain of 3,804 in the total American physician population.

The council's 55th annual report appears in the May 25, 1957, issue of the *Journal of the A.M.A.*

State and territorial boards issued 14,543 licenses during the year, but 7,080 went to doctors already holding licenses from another state or to men who took examinations in more than one state.

Of the total licenses given, 7,122 were by written examination and 7,421 by interstate reciprocity and other methods. Compared with 1955, a near-record year exceeded only by 1946 and 1954, there was a decrease of 297 in the total number of licenses issued.

Most candidates who received licenses by examination came from the 76 approved four-year medical schools in this country and 11 in Canada. The rest were from foreign schools, unapproved schools, schools of osteopathy, and schools no longer operating. Only 4.5 per cent of the 6,149 graduates of approved American schools failed to get licenses. Most failures occurred among graduates of foreign, unapproved or osteopathic schools.

The greatest number of licenses (1,745) was issued by California. New York issued 1,355. More than 500 each were given in Florida, Illinois, Michigan, Ohio, Pennsylvania, and Texas. South Dakota granted the smallest number—18.

The greatest number of graduates from any one school examined was 231 from the University of Tennessee, a state university. The greatest number examined from a private school was 175 from Tulane University School of Medicine. Twenty-seven schools each had more than 100 of their graduates examined for licensure.

Graduates of the new University of Miami School of Medicine, Coral Gables, Florida, and the University of Puerto Rico School of Medicine appeared before medical examining boards for the first time. All 26 of the University of Miami graduates passed.

Eight other schools also had no failures among their graduates. They are Albany Medical College, Albany, New York, Woman's Medical College of Pennsylvania, the Medical College of South Carolina, the University of California at Los Angeles and San Francisco, and the Universities of Southern California, Washington, and Wisconsin.

Foreign school graduates, including both American and foreign-born persons, took 1,783 examination, with 1,012 passing. This is a slight decrease from the number who passed in 1955. There were 852 foreign-trained physicians who received their first American licenses. Of these, 834 received their licenses by examination and 18 by endorsement of credentials. These physicians represented medical schools of the Philippines, New Zealand, 16 South and Central American countries, 24 European countries, and 13 Asian countries.

The number of licenses issued on the basis of geographical areas were: New England, 407; Middle Atlantic, 1,532; East North Central, 1,437; West North Central, 824; South Atlantic, 1,210; East South Central, 469; West South Central, 624; Mountain, 175; Pacific, 720; and territories and possessions, 65.

CAVALCADE OF HEALTH

(Continued from Page 285)

Henry H. Turner, M.D., Oklahoma City, was designated as chairman of the committee to organize what is probably the State Association's greatest single public service endeavor.

Assisting Doctor Turner were: Vernon Cushing, M.D., Vice-Chairman of the General Committee; Meredith Appleton, M.D., Chairman of the Executive Committee; John Cunningham, M.D., Chairman of the Exhibits Committee; S. Fulton Tompkins, M.D., Chairman of the Motion Picture Review Committee and William J. Dowling, M.D., Chairman of the Publicity Committee.

PROCEEDINGS OF THE HOUSE OF DELEGATES

OKLAHOMA STATE MEDICAL ASSOCIATION

OPENING SESSION

The 51st Annual Session of the House of Delegates of the Oklahoma State Medical Association was called to order at 1:00 p.m., Sunday, May 5, 1957, in the Pompeian Room of the Mayo Hotel in Tulsa, Oklahoma, by the Speaker of the House, Clinton Gallaher, M.D.

Doctor Charles E. Green, of Lawton, gave the invocation.

Doctor Gallaher asked the Credentials Committee if a quorum was present. C. Riley Strong, M.D., Chairman announced that a quorum was present.

The Speaker announced the appointment of the following Committees:

Credentials Committee

C. Riley Strong, M.D., Chairman, El Reno
H. V. Schaff, M.D., Holdenville
A. L. Buell, M.D., Okmulgee

Resolutions Committee

A. T. Baker, M.D., Chairman, Durant
L. G. Livingston, M.D., Cordell
J. C. Amspacher, M.D., Oklahoma City

Sergeants at Arms

Charles E. Green, M.D., Lawton
Ollie McBride, M.D., Ada

Tellers

M. H. Newman, M.D., Shattuck
A. L. Johnson, M.D., El Reno

Constitution and By-Laws

William T. Gill, M.D., Chairman, Ada
John E. Highland, M.D., Miami
G. R. Russell, M.D., Tulsa

Doctor Gallaher announced that there were a number of honored guests present and introduced first, Mrs. L. Gordon Livingston, President of the Woman's Auxiliary to the Oklahoma State Medical Association.

Mrs. Livingston addressed the House of Delegates, touching on the accomplishments of the Auxiliary during the past year. She thanked the physicians for their support in aiding the Auxiliary in its work.

Mrs. Livingston also paid tribute to her many workers who had materially aided her in carrying out the fine program experienced during the year.

The Speaker then introduced other distinguished guests present:

Stephen Donahue of the American Medical Association.

Malcom E. Phelps, M.D., El Reno, President of the American Academy of General Practice.

James M. Kolb, M.D., Clarksville, Arkansas, Chairman of the Council of the Arkansas Medical Association.

Fount Richardson, M.D., Fayetteville, Arkansas,

Chairman of the Board of the Arkansas State Medical Association.

Doctor Gallaher then recognized John E. McDonald, M.D., Tulsa, who introduced David B. Allman, M.D., President-Elect of the American Medical Association.

Doctor Allman delivered an inspiring address to the Delegates, in which he reviewed his past year's experiences as President of the A.M.A.

Doctor Allman spoke briefly on different points of interest to the Delegates, including mental health, alcoholism, and traffic accidents.

Doctor Allman concluded his remarks by stating, "The work of the American Medical Association in each of the above areas is a scientific and democratic approach to the health problems of the United States to the benefit of all Americans. Health alone is necessary, and a nation's best resource is its good health.

So concluded the introduction of guests.

Doctor Gallaher made the following announcements:

All voting Delegates will please be seated in the front of the room. Those with out votes will please be seated in the back of the room.

Doctor Gallaher stated that he was well acquainted with most of the Delegates present but would delegates be certain that the Recording Secretary has the name of each Delegate recognized by the Chair.

Doctor Gallaher called for announcements to be made from the floor. There were no additional announcements.

Doctor Gallaher asked the pleasure of the house with regard to the reading of the minutes.

Doctor William T. Gill, Ada, moved: "That the reading of the minutes be passed at this time, and they be approved as written.

Doctor Louis H. Ritzhaupt, Guthrie, moved: The motion be amended to read: "Approved as published." Motion was seconded and carried.

Next order of business, The Speaker announced, was a report from E. Faye Lester, M.D., Secretary of the Board of Medical Examiners of Oklahoma.

Doctor Lester briefly explained the reason for the Boards' request that the Registration fee for Oklahoma be raised from \$3.00 to \$5.00. This, Doctor Lester stated, was brought about by the fact that growing and expanding duties of the office had added much in the way of operating expenses.

Following Doctor Lester's report, Doctor Gallaher announced that the next order of business was the election of officers.

The Speaker advised that Districts No. 2, No. 5, No. 8, No. 11, and No. 14 were to elect Councilors and Vice-Councilors this year; District No. 7, would elect a Vice-Councilor, due to the resignation of Paul Gallaher, M.D., Shawnee, at the Council meeting the evening before.

District No. 9, will also elect a Vice-Councilor, due to the death of I. W. Bollinger, M.D., Henryetta.

Doctor Gallaher announced a ten minute recess to allow the Districts to caucus, and announced the region of the room where each District would caucus.

Following the recess the House reconvened and the Chair announced that the House was open for nominations for the Office of President-Elect.

C. E. Northcutt, M.D., Ponca City, nominated E. C. Mohler, M.D., Ponca City for the office of President-Elect.

Marvin B. Glismann, M.D., Oklahoma City, nominated Marshall O. Hart, M.D., Tulsa for the office of President-Elect.

The Speaker called for nominations for the office of Vice-President.

Malcom E. Phelps, M.D., El Reno, nominated A. L. Johnson, M.D., El Reno for the office of Vice-President.

Doctor Gallaher called for nominations to the office of Secretary-Treasurer.

Paul D. Erwin, M.D., Oklahoma City, nominated Johnny A. Blue, M.D., Oklahoma City for the office of Secretary-Treasurer.

Doctor Gallaher called for nominations for Delegate to the American Medical Association. Doctor J. Hoyle Carlock, Ardmore, nominated Malcom E. Phelps, M.D., El Reno to the office of Delegate to the A.M.A.

Doctor Gallaher called for nominations to the office of Alternate Delegate to the A.M.A.

James R. Colvert, M.D., Oklahoma City, nominated R. Q. Goodwin, M.D., Oklahoma City to the office of Alternate Delegate to the A.M.A.

Next were the nominations for Councilor and Vice-Councilor.

District No. 2—James W. Murphree, M.D., Ponca City, nominated E. C. Mohler, M.D., Ponca City as Councilor and Powell Fry, M.D., Stillwater as Vice-Councilor. Both to succeed themselves.

District No. 5—A. L. Johnson, M.D., El Reno, nominated Ross Deputy, M.D., Clinton, as Councilor and C. Riley Strong, M.D., El Reno as Vice-Councilor.

District No. 7—C. C. Young, M.D., Shawnee, nominated Edward K. Norfleet, M.D., Bristow, to fill the unexpired term of Paul Gallaher, M.D., Shawnee.

District No. 9—Francis R. First, M.D., Checotah, nominated R. L. Currie, M.D., Sallisaw, for the position of Vice-Councilor.

District No. 11—A. T. Baker, M.D., Durant, nominated Thomas E. Rhea, M.D., Idabel, Councilor and W. A. Hyde, M.D., Durant, for the position of Vice-Councilor.

District No. 14—L. Gordon Livingston, M.D., Cordell nominated J. B. Hollis, M.D., Mangum, for Councilor, and R. R. Hannas, M.D., Sentinel, for Vice-Councilor.

The Speaker announced the privilege of the Delegates to make further nominations from the floor. As there were no further nominations, this concluded the nominations of officers.

Doctor Gallaher announced that the 1958 Annual Meeting would be held in Oklahoma City on May 4-5-6-7. The 1959 meeting, by recommendation of

the Council, will be held in Tulsa, date to be with the approval of the Tulsa County Medical Society.

The next order of business was the report of officers. The Speaker called for a report from John F. Burton, M.D., Delegate to the A.M.A.

Doctor Burton gave a brief report, in which he stated that a firm stand had been taken with regard to Veterans Affairs.

Doctor Burton urged physicians entering the Association to show interest in the functions of the A.M.A. He thanked the House of Delegates for the privilege and honor accorded him in serving as Delegate to the A.M.A.

Doctor Gallaher called on Wilkie D. Hoover, M.D., Tulsa, Delegate to the A.M.A. for a report.

Doctor Hoover stated that as this was his first year of service, he had been largely engaged in learning. He stated that it was a very compelling experience. Doctor Hoover thanked Doctor Burton for his very valuable assistance.

Doctor Gallaher then called on E. H. Shuller, M.D., McAlester, Alternate Delegate to the A.M.A.

Doctor Shuller spoke briefly on the tremendous amount of work undertaken by the A.M.A. House of Delegates, and urged all members, whenever possible, to visit the A.M.A. House of Delegates.

The Speaker called on Malcom E. Phelps, M.D., El Reno, Alternate Delegate to the A.M.A.

Doctor Phelps announced the appointment of John F. Burton, M.D., to the A.M.A. Council on Medical Services, and stated that his election was without opposition.

Doctor Gallaher asked if there was a report from any of the Councilor Districts. As they were not, the Speaker announced the next order of business would be the Report of the Council. The report was delivered by Doctor H. M. McClure, President of the Association.

Report of the Council

The Council in making the 51st Annual Report to the House of Delegates is not unmindful of the fact that in this Semi-Centennial year of statehood that medicine has moved ahead in its scientific achievements, and has much for which it can be proud in this field.

The economic and social problems that have come along with the advancement of scientific medicine have, likewise, been problems that have had to be solved, and whether their solutions have all had meritorious value is a moot question.

This report, as all previous reports, cannot possibly deal with all of the accomplishments, programs, and problems of the Association for the past year, and for this reason, only the necessary business on which the house of Delegates should establish policy, where indicated, will be presented.

Membership

The paid membership of the Association, as of May 1, 1957, was 1,474, of which 70 were one-half dues members, which corresponds to 103 at the same time last year. This reduction has been brought about by the action of the last year's House of Dele-

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the first
time

24 HOUR SULFA THERAPY



A single dose of KYNEX provides therapeutic blood levels within the hour. Blood concentration peaks are reached within 2 hours — 10 mg. per cent blood levels persist beyond 24 hours.¹

For greater safety: low dosage, high solubility and slow excretion help avoid crystalluria.
For broad antibacterial effectiveness: KYNEX is particularly efficient in urinary tract infections due to sulfonamide-sensitive organisms, including *E. coli*, *Aerobacter aerogenes*, paracolon bacilli, streptococci, staphylococci, Gram-negative rods, diphtheroids and Gram-

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positive cocci. **For convenience:** the low dosage of 1 Gm. (2 tablets) per day offers optimum convenience and acceptance to patients.

Tablets: Each tablet contains 0.5 Gm. ($7\frac{1}{2}$ grains) of sulfamethoxypyridazine. Bottles of 24 and 100 Tablets.

Syrup: Each teaspoonful (5 cc.) of caramel-flavored syrup contains 250 mg. of sulfamethoxypyridazine. Bottle of 4 fl. oz.

1. Boger, W. P.; Strickland, C. S.; and Gylfe, J. M. Antibiot. Med. & Clin. Ther. 3:378 (Nov.) 1956.

KYNEX *

SULFAMETHOXYPYRIDAZINE LEDERLE

*Reg. U.S. Pat. Off.

LEDERLE LABORATORIES DIVISION, AMERICAN CYANAMID COMPANY, PEARL RIVER, NEW YORK



gates in amending the By-Laws to provide for only one year's exemption rather than two years.

Finances and Budget

The Council must again make the comment that the estimating of income and budget expenditures in May, for the following year, is a virtual impossibility, and particularly so at this time due to the unknown operating costs of the new building, which has only been occupied since September 1, 1956.

However, it is not believed that the operating expenses will be in an amount over and above that which was previously paid in rent, and for this reason, the Council recommends that the dues remain at \$42 as they have been for the past seven years.

The House of Delegates is also reminded that the 1956 House of Delegates voted to establish a building fund fee for all new members, in the amount of \$35. Predicated on the number of new members in 1956, which figure was 73, the amount of money to be received from this source are maintained in a special fund and can only be used for maintenance, repairs, and additions.

The Association on December 31, 1956, had cash on hand in the Liberty National Bank, \$5,639.81, which sum does not include any 1957 dues. In addition, it had on deposit \$10,000.00 in the Ponca City Building and Loan Association, and \$2,000 in Government bonds, for a total of \$17,663.22 in assets. The United States Treasury Bonds have since expired and have been cashed, leaving the Association with assets, other than cash in the bank, of \$10,000.00.

A report concerning the construction of the new Executive Offices will appear elsewhere in this report.

Budget

Dues	\$61,000
Annual Meeting	7,000
Journal Advertising	24,500
Miscellaneous	1,500
	<hr/>
	\$94,000

Expenditures

Office Expense including Salaries	\$54,000
Annual Meeting	12,500
Journal	24,500
Public Policy	2,500
General Health Affairs Committee	1,500
Legal Expense	1,500
Travel—Out of State	4,000
History of Medicine	500
	<hr/>
Total	\$92,000
Income Over Expenditures	2,000

Executive Offices

The new headquarters of the Association, located at 601 NW Expressway (US 66 By-pass), was built at a total cost, including furnishings, of \$99,564.20. For those of you who have not visited the new offices, the building is located on 2.26 acres, and is a building of 40 x 120; built of Clarksville, Arkansas Limestone, fully air-conditioned, with a large meeting room of sufficient size to hold a House of Delegates

meeting. In addition, there are parking facilities for 100 cars.

The cost of operation of the building, including insurance, janitor services, and utilities is approximately \$3200 per year, or an average cost of \$275 per month, which is the amount of money the Association was previously paying in rent. At the present time the Attorneys and Auditors of the Association are in discussion with the Oklahoma County Assessor's office as to whether or not the Association headquarters will be tax free. The new building was occupied on September 1, 1956, and an Open House was held on February 3, 1957.

The Council urges all members who may have occasion to be in Oklahoma City to visit the new headquarters.

Annual Meeting

Due to the Convention schedules for Oklahoma City, and Tulsa, the Council recommends that the House of Delegates continue its practice of setting the meeting place two years in advance, and recommends that the 1959 meeting again be held in Tulsa. The date for the 1959 Annual Meeting subject to a time set by the Tulsa County Medical Society. Due to the fact that in 1959 Tulsa is holding the Oil Exposition, which is held every three years, and at which time the entire facilities of the City of Tulsa are utilized.

The 1958 Annual Meeting is scheduled for Oklahoma City, on May 4-5-6-7.

With regard to the meeting being held this year in Tulsa, your Council desires to give a special vote of thanks to the General Chairman, Walter E. Brown, M.D., and the Scientific Works Committee Chairman, Edward L. Moore, M.D., and their two Committees for the outstanding program, both scientific and social, that has been arranged for the enjoyment of those who are in attendance.

Life and Honorary Members

The Council had had the following Honorary and Life Membership applications submitted, and recommends to the House of Delegates their election.

Life Membership

Nathan Boggs, M.D., Goodwell
L. G. Blackmer, M.D., Hooker
Charles F. Moore, M.D., Durant
W. P. Jenkins, M.D., Okemah
C. M. Cochran, M.D., Okemah
Paul Mote, M.D., Sapulpa
C. C. Gardner, M.D., Ponca City
E. B. Dunlap, M.D., Lawton
Charles W. Joyce, M.D., Fletcher
S. E. Frierson, M.D., Oklahoma City
Wilson H. Lane, M.D., Oklahoma City
R. W. Minor, M.D., Spiro
Virgil R. Hamble, M.D., Enid
Daniel M. MacDonald, M.D., Tulsa
William S. Crawford, M.D., Tulsa
Fred A. Glass, M.D., Tulsa
John F. Gorrell, M.D., Tulsa
M. C. Etherton, M.D., Tulsa
John Reynolds, M.D., Muskogee
O. C. Klass, M.D., Muskogee

Charles Ed White, M.D., Muskogee
 M. K. Thompson, M.D., Muskogee
 William C. Miller, M.D., Guthrie
 C. W. Townsend, M.D., Oklahoma City
 Noah E. Rurl, M.D., Oklahoma City
 Lucille S. Blachly, M.D., Oklahoma City
 Eva A. Wells, M.D., Oklahoma City
 A. L. Salomon, M.D., Oklahoma City
 Patrick S. Nagle, M.D., Oklahoma City
 Otis Guy Bacon, M.D., Frederick

Honorary Membership

Joseph T. Phelps, M.D., El Reno

At the last meeting of the House of Delegates the Garfield-Kingfisher County Society requested a Committee be appointed to study these memberships classifications and a report on this request will be subsequently made on Amendments to the Constitution and By-Laws.

☆ ☆ ☆

Your Council is considering, however, a matter which has not had a Committee study. This pertains to the establishment of a loan fund for medical students. During the past several years the Association has given an Annual Banquet to the students of the Medical School, through the University of Oklahoma Chapter of the Student A.M.A. This activity has called for an annual expense of around \$500, and it is your Council's recommendation that in place of the holding of this dinner, that \$500 be appropriated for the next five years to create a loan fund of \$2500.

It is further recommended by the Council that this fund be administered by a Committee composed of four members selected by the Council; one member selected by the University of Oklahoma Medical School Alumni; one member selected by the University of Oklahoma School of Medicine, and one member from the Oklahoma University Medical School Chapter of the Student A.M.A. It is also the recommendation of the Council that individual physicians make voluntary contributions to this fund if they so desire. Such contributions would be tax deductible.

☆ ☆ ☆

In the past the Council Report has included certain observations with regard to the work of numerous Committees of the Association, but this year, in order that the meeting of the House of Delegates may be expedited, will refrain from this past procedure and not duplicate the presentations that will be made by the respective Committees. The Council would, however, admonish the Delegates to give serious consideration to all reports that will be made.

This concluded the report of the Council. Doctor Gallaher asked whether the House wished to consider specific items in the report and then approve the report as a whole, or adopt the report as a whole.

Marshall O. Hart, M.D. moved: That the report be accepted. Motion was seconded and carried.

The next item on the Agenda were the Reports of the Individual Committees. The first report was given by H. H. Macumber, M.D., Chickasha, Chairman of the Committee on Medical Service, Hospitals and Prepaid Insurance.

Annual Report of the Committee on Medical Services Hospitals and Prepaid Insurance

The work of this Committee during the past year has been primarily concerned with the implementation and administration of the Military Dependents Medical Care Act ("Medicare" Program, Public Law 569). This program was referred to your Committee in July, 1956. The Committee studied all available information in regard to the program and attended regional meetings in Chicago and Denver with other State Societies. After careful study, your Committee recommended to the Council: (1) That the Oklahoma State Medical Association participate in the program as contracting agent, (2) That Blue Shield be designated as our fiscal agent, (3) That the Oklahoma Fee Schedule for the program be worked out on the basis of the California Relative Value Schedule. On September 9, 1956, the Council considered this program and approved the recommendations of the Committee.

Component County Societies were surveyed and information gathered concerning average fees over the State in the major classifications of Surgery, Medicine, Pathology, and Radiology. Blue Shield provided us with data of actual charges submitted by Oklahoma physicians for their services during the past year. Meetings were held with various specialty groups. Based on the information so derived, the committee arrived at unit values of \$4 for Medicine and surgery and \$5 for pathology and radiology. A few minor adjustments were made, and the fee schedule was then projected for each service to be provided under the program. It is important that the program was that of the Government and decisions of the Oklahoma State Medical Association were largely limited to the three points enumerated in paragraph one.

On October 28, 1956, a special meeting of the House of Delegates was called by the President, and the program was adopted. In November, 1956, a contract was signed between the Oklahoma State Medical Association, Blue Shield and the Government. This contract expires as of 6-30-57 but may be renewed at that time. A manual outlining the program and the fee schedule was prepared and distributed to all members of the organization. The program went into effect as of December 7, 1956.

This program has now been in effect for five months. The number of claims and aggregate dollar amount paid for the various categories are as follows:

Cotegory	Number of Claims Paid	Aggregate Amount Paid
Medicine -----	608	\$ 19,279.30
Surgery -----	1125	72,714.00
Obstetrics -----	1060	82,404.20
Pathology -----	70	1,341.00
Radiology -----	304	3,372.00
TOTAL -----	3167	\$183,110.50

It can be seen that the volume of services performed under this program has been increasing in a geometric way, and it is anticipated that this increase will continue for several months before leveling off.

The Administration of the program has presented some difficulties, due to the following:

- (1) The *exact wording and arrangement* of the *services* to be performed by physicians was entirely that of the Government, and in many cases, some misunderstanding has developed regarding the exact service referred to. This criticism is inherent in any fixed-fee schedule program and can never be entirely eliminated.
- (2) In spite of as much publicity as we could arrange, including distribution of the manual to all member physicians, it has become apparent that many physicians have not familiarized *themselves* with the provisions of the Law as passed by Congress and under which the program must operate. This has led to unnecessary correspondence between the Committee and member physicians, and in some cases to delay in processing claims. It is hoped that this factor can be minimized as time goes by and to this end, local meetings have been held and periodic bulletins are being distributed, outlining areas of greatest misunderstanding.
- (3) *Dissatisfaction* has developed on the part of certain specialty groups as well as physicians practicing in certain geographical locations in regard to the state-wide average fee schedule under which the program operates. I believe this criticism is valid to a certain extent, but under the program as set up under the Government, no other approach has been possible to this time. Your Committee will continue working to eliminate and improve all apparent deficiencies insofar as this lies within its power.

Your Committee makes the following recommendations:

- (1) That the O.A.M.A. renew our current contract under which the "MEDICARE" program is operating in our State, for an additional period of twelve (12) months from June 30, 1957.
- (2) That any *major* changes in the program be deferred until more experience has been had and the wishes of our membership can be definitely determined.

The Chairman of your Committee wishes to call attention to the splendid cooperation and aid which he has received at all times from our Executive Secretary, Mr. Dick Graham, and his very cooperative staff at the Oklahoma State Medical Association headquarters. He also wishes to extend his thanks and appreciation for the fine cooperation and efficient way in which Blue Shield has worked with us. In particular, the Chairman wishes to thank each member of the Committee, all of whom have worked diligently during the past year.

H. H. Macumber, M.D., Chairman
 C. M. Bielstein, M.D.
 Walter E. Brown, M.D.
 J. E. Highland, M.D.
 Horton Hughes, M.D.
 Gerald Rogers, M.D.
 Henry Russell, M.D.

At the conclusion of the Report, it was moved by Wayne Starkey, M. D., that the report be approved and a standing vote of appreciation be given to Doctor

Macumber and his Committee. The motion was seconded and carried.

Doctor Gallaher announced that the next report on the Agenda would be from the Committee on Medical Care for the Recipients of Public Welfare Assistance, given by the Chairman, C. M. Bielstein, M. D., Oklahoma City.

Committee on Medical Care for the Recipients of Public Welfare Assistance Report

In November of 1956, Doctor H. M. McClure, appointed a Committee on Medical Care for the Recipients of Public Welfare Assistance. This Committee functions as a sub-committee of the Medical Service, Hospital and Prepaid Insurance Committee. The members of the sub-committee are as follows: C. M. Bielstein, M. D., Chairman, Oklahoma City; Thomas E. Rhea, M. D., Idabel; A. T. Baker, M. D., Durant; Hugh Perry, M. D., Tulsa, and John F. Burton, M. D., Oklahoma City.

It was requested by Mr. Lloyd E. Rader, Director of the Public Welfare Department of the State of Oklahoma, that the Oklahoma State Medical Association and the Oklahoma Hospital Association arrive at a workable program in order to implement medical care for the recipients of the Public Welfare Department.

This program will include the following categories: Old age assistance, blind and/or permanently disabled, and aid to dependent children. This program does not include children themselves, since all of the indigent children in Oklahoma are cared for by the Crippled Children's Commission. This program also will not care for those people between the ages of 21 (the age limit under which a person is eligible through the Crippled Children's Commission) and age 65 who are not blind or permanently disabled, or the parents or guardians of dependent children.

Public Law 880, passed by the 84th Congress is effective July 1, 1957, and is based on Amendments to the Social Security Act. Public Law 880, will provide matching Federal funds to State funds, to a maximum amount of six dollars for adults, and three dollars for children, to be used in a medical care program by the various States.

The amount of money available for the medical care program in Oklahoma for the Fiscal year of 1957 - 58 approached ten million dollars. The exact amount will not be known until after the present budget and changes in Oklahoma law are established.

It is to be remembered, that this is a Federal and State program which will be undertaken whether or not there is participation by the Oklahoma State Medical Association, per se.

Immediately upon being appointed, your Committee set about to gain as much knowledge as possible concerning this program, and acquiring as much material as possible concerning State programs which are in operation in various parts of the United States. The Committee was able to accumulate material from Rhode Island, Connecticut, Pennsylvania, Washing-

ton, New Mexico, and Ohio. In addition there were various reports prepared on Medical Care for Indigents by the Council on Medical Services of the A.M.A. In addition, one trip for the purpose of obtaining direct information was made to New Mexico by the Chairman of the Committee.

The first meeting of the Committee was held on February 18, 1957, and since that time there have been frequent meetings of the Committee, and both formal and informal meetings with the other agencies involved (Oklahoma Hospital Association and the Public Welfare Department).

In the interval between the first meeting and the present time much has been accomplished, insofar as understanding, cooperation, and agreement is concerned. However, much more must be accomplished before such a program can be presented to this body for final approval.

Your Committee has approached this problem on the principle that Medical Care of the indigents should, and does, approach the care of the private patient. Therefore, it is reasonable to expect a fair fee to the physician for the services which he renders. At this point no definite fee schedule has either been presented for acceptance, or rejected by anyone. It has been the feeling of the Committee that a fair fee schedule might be based on 75 percent of the medicare fee schedule, with which you are acquainted. This figure has been presented to the agencies involved. The attitude of the Committee at the present time is, that while this represents a fair fee, we must it accordingly with regard to adjustments made by the other participating agencies. One cannot say whether or not this will be the final figure arrived at for your consideration.

A second principle which your Committee is insisting upon is, that in view of the lack of adequate funds for a complete medical care program (which might be expected to cost in the neighborhood of 25 million dollars annually) that any program which we cared to participate in would be on a very restricted basis, in order that monies available could be spent offering excellent care for those eligible. With that in mind, it is our hope to have this program consist completely of a hospital care program. It is our feeling that there should be no out-patient care program. This particular principle is one that we may not be able to develop completely to our satisfaction, as the feeling of the Public Welfare Department is that a too restricted program would make the funds available to too few patients.

Another principle about which your committee feels very strongly is that there shall be adequate representatives from all agencies involved to advise and assist the Director of the Public Welfare Department in the administration of such a program. Your Committee also feels very strongly that there should be easy access to those administering the program for anyone who considers himself as having a problem with the proper functioning of the program.

It is the sincere hope of your Committee that such a program will have as a part of its armamentarium

individual committees in each county which can assist in the:

1. Proper function of the Program.
2. Prevent waste and abuse, preservation of the funds available.
3. Maintain the integrity of each of the agencies involved.

In completing this, which is an interim report, may I ask your indulgence for a few personal remarks. Insofar as I know, there is no man on this Committee who is any way agrees with the philosophy which prompted the changes in the law to provide for this program. In spite of this, each member of the Committee has given all of the time and study that has been necessary to bring the plans this far. For this I should like to publicly express my appreciation to them.

C. M. Bielstein, M. D., Chairman
Committee on Medical Care for the Recipients of Public Welfare Assistance.

Following this report it was moved by A. L. Johnson, M. D., that this report be approved. The motion was duly seconded.

Doctor Louis H. Ritzhaupt offered a substitute motion: "That the Council of the Oklahoma State Medical Association be empowered to appoint a Committee as desired; said Committee to work with the Public Welfare Department in this regard."

Following subsequent comments, Doctor Ritzhaupt withdrew his motion, stating that it was based on misunderstanding.

The Chair then called for a vote on the original motion made by Doctor Johnson. The Motion carried.

Doctor Gallaher called for a report from the Public Committee.

Report of Public Policy Committee

By Vernon D. Cushing, M.D.

In the past your Committee has reviewed both Federal and State Legislation, however it will, at this time, only report of State legislation due to the fact that recently through the Legislative Committee of the A.M.A. there has been established in Oklahoma a legislative group that will devote its efforts to Federal legislation and will make a supplementary report to the House of Delegates.

The Oklahoma legislative group, appointed by the A.M.A., has as its Chairman, J. Hoyle Carlock, M.D., of Ardmore. Representing the various Congressional Districts are the following:

H. M. McClure, M.D., Chickasha—President

John E. McDonald, M.D., Tulsa—A.M.A. Legislative Committee Member

J. Hoyle Carlock, M.D., Ardmore—Chairman of the State Group

District 1 Hugh Perry, M.D., Tulsa
 District 1 Evans Talley, M.D., Enid
 District 2 Wylie G. Chestnut, M.D., Miami
 District 2 William N. Weaver, M.D., Muskogee
 District 3 A. T. Baker, M.D., Durant
 District 3 C. E. Lively, M.D., McAlester
 District 4 Clifford M. Bassett, M.D., Cushing
 District 4 Ollie McBride, M.D., Ada
 District 5 Vernon D. Cushing, M.D., Oklahoma City
 District 5 M. E. Robberson, M.D., Wynnewood
 District 6 E. A. McGrew, M.D., Beaver
 District 6 Paul B. Lingenfelter, M.D., Clinton
 District 6 G. G. Downing, M.D., Lawton

It should not be assumed that this group will supercede the activities of the Public Policy Committee on National Legislation but both this group and the Committee will function jointly.

With regard to State Legislation; there have been eight narcotic bills introduced and passed by the legislature. None of these bills affect the practice of medicine as they all pertain to punitive measures for violation of the narcotic and barbiturate laws.

The chiropractic profession introduced three bills, two which have failed to pass and one enacted into law. This latter measure provides that after 1956 Chiropractors, before entering Chiropractic school and for the examination, must have sixty (60) hours of accredited college work.

There were two bills introduced with regard to visual care, both of which failed to pass. One bill would have repealed the present law with regard to advertising, and the other bill would have licensed dispensing opticians. This latter will be given additional study by the Committee and the specialty of ophthalmology in the hopes that by the next legislature a bill can be drawn that will be satisfactory to all those persons interested in visual care.

Three bills were introduced in the legislature with regard to lowering the standards for the licensing of pharmacists. These bills are commonly referred to as undergraduate bills and do not require a pharmacist to be a graduate of a four year accredited school of pharmacy. So far, none of these bills have passed, either the House or the Senate, although they are still very much alive. These are Senate Bills No. 366 and No. 438 and it is recommended that if you have an opportunity to discuss these bills with your Senator that you do so. Your Committee has been cooperating with the Oklahoma Pharmaceutical Association in an endeavor to forestall their passage.

The Oklahoma State Psychologists Association introduced a measure that would certify psychologists. Your Committee consulted with the Oklahoma State Association of Neurologists and Psychiatrists, and on their recommendation opposed the bill. It died in the Professional and Occupational Regulations Committee.

Your Committee has supported two measures, both of which passed. One measure gives a person the

right to will any part or all of their body for medical research. This bill was also sponsored by the Kiwanis Clubs of the State who have indicated that they will finance an eye bank for the University Hospital. The other measure supported by the Committee and passed was a raise in the Annual registration fee for physicians from \$3.00 to \$5.00, the need for which has already been explained by the Secretary of the Board of Medical Examiners, Doctor E. Faye Lester, Oklahoma City.

The usual bill concerning the right of free choice of physicians for workmen's compensation cases was introduced but was not reported by the Committee.

Numerous bills have been introduced with regard to adoption proceedings but none of these bills would affect the practice of medicine. Also legislation is pending in the Senate concerning the admissions and releases of mental patients admitted to general hospitals. This particular measure is at the present time being re-written and our own Senator Ritzhaupt has assisted in this amendment.

Appropriation for both the Mental Health Program and the Medical School will, in the opinion of your Committee, have some increases but the increases will not be as large as requested. The request of the Medical School and its teaching hospital is for \$7,073,768, and for the Mental Health Program 27 million plus.

The State Health Department has one measure of particular interest to the profession. This is a Resolution to amend the Constitution to allow individual Counties by popular vote, to levy additional moneys for the purpose of full-time health units. Its passage seems doubtful.

Your Committee has had brought to its attention the Resolution introduced by the Tulsa County Medical Society requesting that the Committee, during the Legislature, issue periodic bulletins on all measures before the legislature. It accepts this Resolution and its intent and will issue such bulletins in all future sessions of the legislature.

On the same subject, however, your Committee would like to say that while it did not issue such bulletins this year, it did report the measures in the legislature in the Journal up until the last issue, but it is now recognized that this is, no doubt, insufficient.

The Committee would like to recognize and extend its appreciation to Senator Louis H. Ritzhaupt who has been extremely cooperative and helpful during this session of the legislature as he always has in the past.

While it cannot be categorically stated that no legislation detrimental to the health of the public will not be passed by the legislature since it has not yet adjourned. At the present time your Committee does not believe that such may happen.

At this time Doctor Gallaher turned the Chair over to Doctor J. Hoyle Carlock, Vice-Speaker.

Doctor Carlock called for a report from John E.

McDonald, M.D., of the Oklahoma Legislative Committee.

Doctor McDonald reported briefly of the activities of the Legislative Committee and presented the following Resolution to the House of Delegates. Said Resolution to be voted on in the Closing Session.

WHEREAS, It is understood that the House of Delegates of the American Medical Association at its next annual meeting will discuss the desirability of participation of Medical doctors in the Federal Social Security System on a compulsory basis, and

WHEREAS, this subject has been of much interest to Oklahoma doctors with many divergent views of individual physicians as to the future course of official medical policy in this regard, and

WHEREAS, it is desirable that the delegates from Oklahoma to the American Medical Association be instructed as to the wishes of their constituents,

NOW, THEREFORE, be it resolved that the subject of participation of medical doctors in the Federal Social Security System on a compulsory basis be introduced for discussion at the House of Delegates of the Oklahoma State Medical Association on Sunday May 5th, and

BE IT FURTHER RESOLVED, that the House of Delegates instruct the delegates from Oklahoma to the House of Delegates of the American Medical Association that its members favor participation in Federal Social Security on a compulsory basis.

It was moved by Nolen Armstrong, M.D., Oklahoma that the report of Doctor McDonald be approved. Motion was seconded and carried.

Doctor Carlock announced that Doctor John E. McDonald, Chairman of the Grievance Committee would give the report of that Committee.

Grievance Committee

The Grievance Committee of the Oklahoma State Medical Association hereby makes its report of the cases studied for the year of 1956-57. Sixteen new cases were received by the Committee, and five old ones were carried over for a total of 21, which have been considered during the year. Of these, 15 have been closed, leaving six for further processing.

As in the past, the complaints have been about equally divided, concerning fees and medical services, although a few include both fees and services rendered. Of the 15 cases closed during the period, six involve fee only, six professional services alone, and three both the fee and the service.

Of the six cases now remaining before the Committee, three involve the fee only; one service only; two both the fee and the service.

You will see then that complaints concerning the fee involves about two-thirds of the cases, and many

of these could be obviated if the physicians had a definite understanding beforehand concerning the approximate fee involved in major medical illness and surgical procedure.

Also if the physician on occasion would take time to view the entire picture a little more from the patients side, many of the complaints concerning service would not arise.

While deliberation and time are necessary for the proper investigation, decision and disposition of these complaints, it seems that it would be desirable, especially from the complainants viewpoint, for the Committee to have more frequent meetings in order that a final decision can be reached without so much delay.

Following the report, it was moved by James R. Colvert, M.D., that this report be approved. Motion was seconded and carried.

Doctor Carlock turned the Chair back to Doctor Gallaher, who called for a report from the Committee on Medical Care Under the United Mine Workers Association Welfare and Retirement Fund. The report was delivered by the Chairman, Malcom E. Phelps, M.D., El Reno.

Report of the Committee on Medical Care Under the U.M.W.A. Welfare and Retirement Fund

A special Committee appointed by the President of the Oklahoma State Medical Association to discuss problems arising out of certain policies of the United Mine Workers of America Health and Welfare Fund, respectfully submits the following report:

On three different occasions your Committee has met, twice with George H. Brother, M.D., Area Medical Director for the U.M.W.A. Fund. These meetings each lasted for several hours and problems arising from certain U.M.W.A. directives were discussed at length.

Your Committee submitted to Doctor Brother and to Doctor Warren Draper certain proposals which your committee felt were fair and reasonable and which we believed would end the unfair discrimination by the U.M.W.A. of certain Oklahoma Physicians. The last of these proposals, made to Doctor Brother on December 16, 1956, proposed the formation of a credentials committee which would establish the eligibility of physicians to participate in the U.M.W.A. program. Since no assurance has been received from Doctor Brother that the findings of such a Committee would be honored, no committee was appointed.

During all of the meetings with Doctor Brother your committee received the impression that Doctor Brother and the U.M.W.A. would never accept any plan which allowed the U.M.W.A. recipients to exercise their American right of free choice of physicians.

Your Committee understands that similar problems have arisen in many other states and that in the state of Illinois, the Illinois State Medical Society has forbidden any members of that Society to send

bills to the U.M.W. fund. The Illinois Medical Society has instructed each of its members that they should bill the patient receiving the services.

Your committee has been led to believe that certain committees of the A.M.A. are now devoting much time to this U.M.W.A. problem.

Your committee also understands that a number of resolutions will be submitted to the House of Delegates of the A.M.A. which meets in June, 1957, in New York City.

Your committee recommends that no action be taken by the House of Delegates of the Oklahoma State Medical Association at this time. Your Committee feels that we should be guided by whatever action may be forthcoming from the House of Delegates of the American Medical Association.

Respectfully submitted,
Malcom E. Phelps, M.D., Chairman
E. C. Mohler, M.D.
Robert W. Lowery, M.D.
H. C. Wheeler, M.D.
Floyd T. Barnheld, M.D.
Clifford Bassett, M.D.

At the conclusion of this report it was moved by A. L. Johnson, M. D., that this report be approved. The motion was duly seconded and carried.

Doctor Gallaher announced that the next report to be heard was from the Cavalcade of Health Committee. In the absence of the Chairman Henry H. Turner, M. D., Oklahoma City, the report was delivered by Mr. Don Blair, Associate Executive Secretary.

Cavalcade of Health Committee Report

On January 20, 1957, the Council of the Oklahoma State Medical Association approved participation in Oklahoma's Semi-Centennial Exposition, which takes place in Oklahoma City between June 14 and July 7. Your Committee, as appointed by the President, was directed to promote a health education show entitled "Cavalcade of Health" and allowed a contingency fund of \$2500.00.

Subsequently a meeting was held in the Executive office of the Association, to which representatives from related medical groups, voluntary health agencies, official state agencies, and pharmaceutical manufacturers were invited. Each organization was asked to participate with the O.S.M.A. and help underwrite the costs by sub-leasing exhibit booths at \$500 for the first booth and \$250 for each additional space.

To date, forty-three booths have been sub-let to 31 organizations, representing an income of \$19,500. It has not been necessary to utilize any of the contingency fund at this point.

All exhibit material from the invited exhibitors will be screened and approved by a sub-committee. The exhibitors have been informed that their exhibits must be directed toward health education of the laity, and

that no commercialism, or fund solicitation will be allowed.

In addition to the 43 exhibits mentioned, the committee has arranged to have 8 of the A.M.A.'s outstanding exhibits on display. The committee has also arranged to exhibit a live, training reactor during the show and an internationally known health exhibit of the female body which was loaned to us by the Government of the Dominican Republic.

An outstanding exhibit will be specifically designed and constructed to represent the Oklahoma State Medical Association. It will depict the evolution and progress made in the practice of medicine over the past fifty years of Oklahoma's history by showing two adjacent offices; one equipped with 1907 equipment, and the other with the latest fixtures and facilities of the modern-day physician. Supporting copy will delineate the progress made in medical knowledge, drugs and equipment.

Your committee wishes to impress upon the House of Delegates the great magnitude of the Semi-Centennial Exposition and the important part being played by the Cavalcade of Health. The efforts of the Association should not only provide a real public service to the citizens of Oklahoma and the southwest, but should also enhance the position of the medical profession in the eyes of the public. It is hoped that the physicians of Oklahoma will make every effort to attend the Cavalcade of Health, assist the committee by utilizing all forthcoming publicity material, and encourage their friends and patients to take advantage of the authoritative health information which will be offered in one of the nation's best health education shows to be offered this year.

Following the presentation of this report it was moved by Doctor Marshall O. Hart that this report be approved. The motion was duly seconded and carried. pany could not continue to insure us for the rates we were paying. We were given figures showing that the loss ratio had reached 110 percent last year and this year, and it was requested that we put on an educational campaign among the doctors of Oklahoma to try to cut down the number of claims. Mr. Parish stated that if we could show some improvement by June of this year the company would try to go along with us; but if not, they were going to have to do something about it.

In line with this request, your committee has arranged and held meetings in Oklahoma County at

The principal activity of this committee during the past year has been the consideration of problems connected with malpractice insurance. At a meeting on December 16, 1956, attended by Mr. John Parish, Secretary of the St. Paul Indemnity Company, we were informed that the loss ratio of our organization had climbed rapidly to a point so high that the com-

Doctor Gallaher called for the report from the Insurance Committee as the next item on the Agenda.

Basil A. Hayes, M.D., Oklahoma City, Chairman of the Insurance Committee delivered the following report:

Report of the Insurance Committee

Your Insurance Committee for the past year has consisted of:

H. M. McClure, M. D., Chickasha, President
Basil A. Hayes, M. D., Chairman, Oklahoma City
Port Johnson, M. D., Muskogee
E. E. Beechwood, M. D., Bartlesville
Bruce R. Hinson, M. D., Enid
Ralph A. Smith, M. D., Oklahoma City
Wilkie D. Hoover, M. D., Tulsa
E. C. Lindley, M. D., Duncan
Fred Fox, M. D., Lawton

Oklahoma City; Comanche, Jackson, and Stephens Counties at Lawton; Cleveland and McClain Counties at Norman; Pontotoc, Hughes and Seminole Counties at Ada; and in Logan County at Guthrie. In each of these meetings the entire matter was thoroughly gone into, the meetings were well attended, and the doctors seemed to be deeply impressed. We are waiting until the May meeting to go before the Pottawatomie County Society at Shawnee, and Okmulgee and Okfuskee Counties at Okemah. We have not had a meeting with the Tulsa County Society for the reason that we were there the latter part of 1956 and felt that they are thoroughly indoctrinated. There has been only one case of importance during the past two years. We have worked actively on that case so that it now is in fairly good condition, and we feel that there is an excellent prospect of winning when it is tried.

Despite these efforts, however, we received a letter from Mr. Parish on April 22, notifying us that our rates are being substantially raised on June 1. We are still negotiating with him and hope that he may be willing to hold off a little while longer before taking such a drastic step. We feel, however, that all we can do at the present is to abide by his rates until the incidence of claims in Oklahoma drops. He has promised us verbally and by letter, that when the loss ratio drops to a reasonable level our rates will go down with it.

Massachusetts Mutual Group Life Insurance Program

This program was started last year and we can report the following figures: Out of 1746 members, there are now 453 insured under this plan. 175 of them are insured for \$10,000 each, and 278 are insured for \$20,000. During the past year three deaths occurred among the \$10,000 group. They were:

C. C. Fulton, M. D., Oklahoma City
George Rahhal, M.D., Atoka
Albert Wallace, M. D., Tulsa

It is interesting to observe that these were relatively young men and it is also interesting to know that the average age of members carrying \$10,000 policies is 43. Members of the Association who belonged at the time this program was inaugurated and who did not take policies, must now be examined in order to qualify for this insurance. New members who have come in since

the initial period on enrollment do not have to be examined. The rates for \$10,000 coverage are:

Up to age 30	\$ 50.60 Annually
From 30 to 40	79.00 Annually
From 40 to 50	145.50 Annually
From 50 to 60	225.65 Annually
From 60 to 64	306.38 Annually

All policies terminate at age 65, unless previously converted

Sick and Accident Insurance

It is the feeling of your committee that the North American Policy now carried by our organization at the present, is not adequate to our needs. We had hoped to make a study of this entire matter and draw up a contract to fit our needs, and ask for bids on it this year, but, unfortunately, the problems of malpractice have kept us so busy that we have not been able to do so. We hope that the committee of next year will be able to give it proper consideration.

New contracts are coming out all the time, and prices in general are going up. What was adequate ten years ago is not adequate now, and we recommend that next year's committee go into the matter thoroughly.

Respectfully submitted,
Basil A. Hayes, M. D., Chairman

Following this report there was a discussion concerning the malpractice insurance program.

Mr. Don Clifford, of the Saint Paul Indemnity Company, was present and was introduced by Doctor Hayes. Mr. Clifford answered questions asked by the Delegates concerning the program and the reason for the raise in rates.

It was, at the end of this discussion moved by Doctor A. L. Johnson that this report be approved. Motion was seconded and carried.

The next order of business was a report from the Resolutions Committee by the Chairman.

The next order of business was a report from the Resolutions Committee, delivered by A. T. Baker, M. D., Durant, Chairman.

Doctor Baker introduced two Resolutions by Title. Said Resolutions will be voted on in the closing session of the House.

Publication of a State Legislative Newsletter by the Oklahoma State Medical Association. Submitted by the Tulsa County Medical Society.

Resolution concerning the Medicare Program. Submitted by the Comanche-Cotton County Medical Society.

The Speaker announced at this time that the Resolutions Committee would be meeting in Room 1317.

Doctor Gallaher announced that the next report on the Agenda was from the Committee on Constitution and By-Laws of the Association. Doctor Gallaher further announced that in the absence of the Chairman, L. Chester McHenry, M.D., the report would be de-

livered by William T. Gill, M.D., Chairman of the House Committee on Constitution and By-Laws.

Committee on Constitution and By-Laws

During the past year, suggestions for necessary and desired changes in the Constitution and By-Laws of the Association have been received. All have been considered by the Committee. A few have not been reduced to Amendment form. Most of them have and are submitted to the Council for its consideration and recommendation.

Your Committee proposes to recommend only those amendments approved by the Council to the Committee on Constitution and By-Laws of the House of Delegates, although you may wish your committee to submit one or more of them to the House of Delegates without recommendation, in which case, that will be done.

For the sake of brevity in this report, only the purpose of each amendment will be stated for the purpose of discussion. All amendments have been drafted for incorporation into the proper place in the Constitution and By-Laws, and are made a part of this report.

Amendments have been drafted to accomplish the following:

1. To make the Editor of the *Journal* a member of the Council.
2. To make past presidents members of the Council for a period of two years.
3. To set up a legal method of impeachment for removal of officers, if necessary. This authorizes the House of Delegates to remove an officer for cause on recommendation of the Council.
1. To make the Editor of the *Journal* a member of tee by the House of Delegates to nominate officers. This to be in addition to the present method of nominating which shall continue to be acceptable. This was rejected by the Council.
5. To prevent a Councilor's being elected Vice-Councilor immediately after completing two elective terms as Councilor, and thus remaining continuously on the Council. This was tabled by the Council.
6. To give direct disciplinary power over an individual member of a component Society.

Thus concluded the report of the Committee on Constitution and By-Laws.

The Speaker announced that the Committee on Constitution and By-Laws would be meeting in Room 1320.

Doctor Gallaher called on C. L. Johnson, M. D., Bartlesville, Chairman of the General Health Committee, to deliver the report of that Committee, and also the report of the Polio Committee, which functioned as a sub-committee.

General Health Committee

Early in January, 1957, the Chairman of the General

Health Committee was notified by the President, Doctor McClure, that he was to attend a meeting called by the A.M.A. with reference to the Polio Vaccine Program. Shortly following this, the members of the General Health Committee were all polled by telephone concerning their desires and as a result, it was found to be the opinion of the members of this Committee that the Polio Vaccine Program should be taken out of the hands of the Federal Government, and out of the hands of the State Government as much as possible and replaced in the individual doctors' offices. This information was imparted to the Council of the Oklahoma State Medical Association at a meeting on the 17th of January, 1957 at which time the Council joined in this opinion and passed a motion to the effect that the Oklahoma State Medical Association would go on record adopting a policy which would encourage an educational program for all out vaccination against poliomyelitis, the vaccine to be administered by physicians in physicians offices, as much as possible. Those able to pay would pay for the vaccine and those unable to pay would receive it free of charge.

At that time, we had no knowledge of the purpose of the meeting in Chicago, with the exception of the fact that there had been much ground work done by the A.M.A.'s Committee on Poliomyelitis along this same line. On January 26, the Chairman attended an all day meeting of representatives of every State in the United States and the Territories, and representatives of the United States Public Health Service.

Information was imparted by several state, and county representatives concerning the fact that the Polio Vaccine Programs had already been initiated in many states. Educational programs for an all out vaccination program were well on the way, supported financially by newspapers, radio stations, private contributions, etc. Primarily in each of these states the program was directed toward, at first, mass immunization clinics planned by a joint action between the medical profession, the Polio Foundation, and the Public Health Units, but primarily planned at the convenience of the local medical profession and manned by representatives of the local medical profession. This was in order to take care of the segment of population which would attend such clinics. The second stage of the program in most of these states was aimed at an educational program with intensive newspaper, radio and television coverage (which by the way, in most instances, was given gratuitously) for emphasis toward encouraging everyone to seek immunization against poliomyelitis IN HIS DOCTORS' OFFICE. For this he was to pay a fee if he could afford to do so. Each doctor was encouraged to charge a fee of not more than \$3 for each immunization and, that in cases where he felt that the patient was unable to pay, the fee would be reduced as he saw fit. The A.M.A.'s Committee on Polio had gone to great lengths to prepare this program. There was an enormous amount of information, printed, given to each physician attending the meeting, outlining the various programs which were discussed. At no time was it indicated at Chicago that any state was to follow any particular program. Each State was given suggestions and ideas and then asked to work out

its own particular program. HOWEVER, GREAT STRESS WAS GIVEN TO THE FACT THAT THIS WAS TO BE A STATE AND COUNTY MEDICAL SOCIETY SUPPORTED PROGRAM, A STATE AND COUNTY MEDICAL SOCIETY PLANNED PROGRAM, AND AN INDIVIDUAL DOCTOR-PATIENT RELATION PROGRAM. The President of the A.M.A. and the President-Elect of the A.M.A. stressed again, and again in addressing this group, stating that this was a golden opportunity to show the people of America that doctors were still willing to give of their time and service to their patients. All of this information is substantiated by copies of all talks made at the meeting in Chicago and all programs which had been in effect up until that time and all programs which went into effect following this meeting, these copies being in file at the Oklahoma State Medical Association's General Health Committee.

Following this meeting in Chicago, several meetings were held of the General Health Committee members at the Oklahoma State Medical Association in Oklahoma City. At each meeting the predominant discussion was centered around:

1. The Source of Free Vaccine.
2. Controversy as to how it was to be administered.
3. Controversy as to low fees.

At no time, was there general agreement among the members of the Committee to follow the plan as it was laid down in Chicago; that encouragement would be given to the individual physicians in this State to administer the vaccine in their office wherever possible. This does not in any way indict any member of the Committee, but the Chairman must report that at no time was there a unanimous consent or majority vote to follow this program. Because of this failure of agreement, it was suggested by the President of the Association that a sub-committee on Polio be created in the General Health Committee and that a new Chairman of this committee be appointed. This was done and Doctor Ben H. Nicholson of Oklahoma City was appointed Chairman of the Committee, and since Doctor C. W. Freeman, also of Oklahoma City. At this time, the Chairman of the General Health Committee was again asked to report to the Council of the State Medical Association in order to try to correlate the ideas of the sub-committee on Polio and the General Health Committee. Primarily all the action taken by the sub-committee on Polio which differed in any respect from that of the A.M.A. and the General Health Committee, was that the Polio Vaccine Program would be returned to each County Medical Society for action, and that the Oklahoma Medical Association would engage in whatever educational program was asked of it, but the National Foundation for Infantile Paralysis would assist financially and educationally in each local county, under the auspices of a local County Polio Committee Chairman appointed by the President of each local County Society.

Shortly after this action and after some lengthy discussion by the Council of the Oklahoma State Medical Association, at which time difficulty was incurred in coming to an agreement, an announcement

was made by the United States Public Health Department that the Polio Vaccine was in extreme short supply, and that all vaccine programs would be curtailed at the present. The Chairman of the General Health Committee wished to state that this was probably a blessing in disguise to this state since, at that time we had no polio vaccine program.

It appears at the present time that polio vaccine is going to be available in great quantity. Some County Societies have already set up programs and have ordered vaccine. Because of information and education received at the meeting in Chicago, it is the opinion of the Chairman of this Committee that any program directed entirely at mass immunization clinics will fail. This is because of the experience of the United States Public Health Service and the experience of the State Health Departments which attempted to set up mass free immunization programs early in vaccine history, resulting in the accumulation of 26 million cc.s of polio vaccine which was going out of date just prior to the meeting called by the A.M.A. in Chicago on January 26. Had it not been for the impetus given to the vaccine program by the A.M.A. and its program, there is no question but what this vaccine would have gone out of date. It was used up primarily by those states described in the earlier paragraphs of this report, and to the greatest extent by immunizations in the doctors' offices. The Chairman of this Committee recognizes the fact that in certain counties the Public Health Department support and the Infantile Paralysis Foundation support will be necessary. At this point, appreciation and commendation should be given to the Oklahoma State Public Health Department and its Director Grady Matthews, M.D., and to the Oklahoma Chapter of the N.F.I.P. and its Director, Mr. Maxwell Pelish for the marvelous work which they have accomplished up to this point, and for the assistance they have offered for this program in the future.

The Chairman of this Committee feels that unless the full strength of the Association is given to the support of an intensive state-wide educational program, directed along the lines of a two-stage program, both mass immunization clinics, and private immunizations in the physician's offices, that the apathy of the public receiving the vaccine will recur as soon as the vaccine is no longer in short supply.

The Chairman of this Committee believes that we may be passing the most golden opportunity that we have ever had in this State to demonstrate the solidarity of all the members of this Association in willingness to give service to the people of this State.

The Chairman wished to thank the members of this Committee for their many hours of diligent work. This has been an extremely difficult task as manifested by the fact that at this time no definite plan has been reached for an intensive all out program. This is not the result of a lack of work or effort on the part of the members of this committee, nor upon the members of the Council, but is because of a wide divergence of opinion naturally expressed by individual physicians.

It is hoped by the Chairman of the Committee that

much thought will be given to this program and its manifestations in the ensuing year.

C. L. Johnson, Jr., M. D.
Chairman of the General
Health Committee

At the conclusion of this report Doctor Johnson delivered the following report from the Chairman of the Polio Committee.

Polio Committee Report

The Polio Committee, a Sub-Committee of the General Health Committee, was created to facilitate a polio immunization program for the people of the State of Oklahoma under 40 years of age.

The first meeting of the Committee was held in the Executive Office of the Association on Sunday, March 17. Doctor John F. Burton, Oklahoma City presided as the temporary Chairman during the election of a permanent Chairman. Charles W. Freeman, M. D., Oklahoma City was elected as the permanent Chairman of the Committee. Other members of the Committee are:

Elmer Ridgeway, M.D., Oklahoma City
L. B. Word, M.D., Bartlesville
C. M. Hodgson, M.D., Kingfisher
Wendell L. Smith, M.D., Tulsa
Mark D. Holcomb, M.D., Enid
F. C. Buffington, M.D., Norman
Robert I. Loftin, M.D., Broken Bow
Hugh C. Graham, M.D., Tulsa
E. H. Shuller, M.D., McAlester
L. G. Livingston, M.D., Cordell
Charles E. Green, M.D., Lawton
Thomas C. Glasscock, M.D., Ponca City
Joe Duer, M.D., Woodward
R. M. Wadsworth, M.D., Tulsa
Kirk Mosley, M.D., Oklahoma City

Two previous meetings of the General Health Committee had been held concerning the subject of a polio vaccination program, and it was decided that a special committee was indicated to implement a polio program.

All decisions subsequently arrived at by the Polio Committee were based on the following resolution which was adopted by the Council at its meeting of February 27, 1957:

THE COUNCIL MOVES: The policy of the Oklahoma State Medical Association will be to spearhead an "All-Out All-Ages Polio Program." The goal of this program to have every man, woman, and child, up to the age of 40, in the State to receive two inoculations of Polio Vaccine by May 15.

FURTHER, That the President and/or the Executive Secretary of the Oklahoma State Medical Association, with the cooperation of the Polio Chairman of the General Health Committee, will screen all publicity releases for this program.

AND FURTHER: That the method, or methods used to accomplish this program will be determined by the local County Society involved. The Council encourages the people of Oklahoma to obtain their vaccinations from their physicians; in conformance to the policy of the American Medical Association.

At the first meeting of the Polio Committee (March 17) the following basic policies concerning the program were acted upon:

1. The appointment of a physician member of the Committee to act as liaison agent between the Association, the State Department of Health, and the Oklahoma State Medical Association, this being Doctor Elmer Ridgeway of Oklahoma City.

2. Arrangements were made for a subsequent meeting with the Chairman of the individual County Polio Committees.

3. It was the wish of the Committee that the Eli Lilly Company be contacted with regard to free promotional material for the program, which they had indicated they wished to supply.

4. All immunization programs would be on a County level.

5. When State Department of Health vaccine was utilized, a responsible person within the County be designated to keep the records required by the State Department of Health.

6. Due to the present shortage of vaccine no time limit could be placed on the program, but the program would get underway as quickly as possible.

7. It was decided that in the matter of the free vaccine from the State Department of Health, the Counties would decide what they wished to do, but if they used the vaccine they would be required to keep records of the vaccine.

On March 31, 1957, a further meeting of the Polio Committee was held, in attendance were representatives from the National Foundation for Infantile Paralysis (Oklahoma Chapter), State Department of Health, Eli Lilly Company, and the Oklahoma State Medical Association. At this time further planning was done and Mr. Pelish, Director of the Oklahoma Chapter of the National Foundation outlined the financial help to the County Polio Committees that would be available from his organization.

All press releases, and publicity since the creation of the Polio Committee have been approved by the Committee and the Executive Office of the Association.

At the present time the possibility of relieving the shortage of vaccine looks much brighter, and it is hoped that the County Societies will be ready to begin their vaccination programs just as soon as the vaccine is once more available.

C. W. Freeman, M.D., Chairman
Polio Committee of the Oklahoma
State Medical Association

Following the reports by Doctor Johnson it was moved by Malcom E. Phelps, M. D. that these reports be approved. Motion was seconded and carried.

At the Conclusion of this business, Doctor Gallaher announced that due to the time element the remainder of the reports would be heard during the closing session.

Doctor Gallaher turned the Chair to Doctor J. Hoyle Carlock, Vice-Speaker, for the reading of the necrology report.

Doctor Carlock requested that all Delegates stand while the necrology report was read.

Necrology Report

Since the last Necrology report in May, 1956, the Almighty in his infinite wisdom has called from our midst thirty-six of our beloved friends and co-workers. While we bow in sorrow to the will of the Almighty, we are appreciative of these wonderful men-physicians, scientists, teachers and friends, and their far reaching influences which will continue to inspire us to carry on their duties to humanity.

THEREFORE BE IT RESOLVED, that the House of Delegates of the Oklahoma State Medical Association recognize the demise of those former fellow physicians and instruct the Secretary to inscribe with honor and regret the following names upon the record of the Association.

Necrology Report

May 1957

John Mosby Alford, M.D., March 30, 1957.
Isaac Wesley Bollinger, M.D., November 28, 1956.
Charles Palmer Bondurant, M.D., October 23, 1956
William LeRoy Bonnell, M.D., 1956
Harry Dillman Boswell, M.D., July 4, 1956.
William Joel Bryan, Jr., M.D., July 4, 1956.
Virgil Vandalour Butler, M.D., January 2, 1957.
Charles Lory Caldwell, M.D., November 14, 1956.
Coyne Herbert Campbell, M.D., January 23, 1957.
D. Bruce Collins, M.D., February 2, 1957.
Ambrose Dixon, M.D., 1957.
Clifford Cannon Fulton, M.D., June 22, 1956.
Lawrence Jefferson George, M.D., February 28, 1957.
Charles Byron Hill, M.D., June 26, 1956.
Isaac Newton Kolb, M.D., July 31, 1956.
Morris Boise Lhevine, M.D., May 19, 1956.
Robert Sidney Love, M.D., May 16, 1956.
Albert Campbell Lucas, M.D., November 16, 1956.
James Patton McGee, M.D., September 11, 1956.
Guy Perry McNaughton, M.D., May 21, 1956.
Samuel West Minor, M.D., July 3, 1956.
William Claude Mitchener, M.D., May 24, 1956.
Silas Murray, M.D., January 12, 1957.
James Hal Neal, Sr., M.D., November 29, 1956.
Laurence Curtis Northrup, M.D., January 24, 1957.

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George Metray Rahhal, M.D., June 27, 1956.
Rudolph Joe Reichert, M.D., May 7, 1956.
Walter Bailey Sanger, M.D., April 12, 1957.
Winnie Monroney Sanger, M.D., February 7, 1957.
William Ezra Seba, M.D., November 28, 1956.
Joseph Green Smith, M.D., May 7, 1956.
Robert Cecil Sullivan, M.D., March 30, 1956.
William Merritt Taylor, M.D., January 3, 1957.
Albert Wicken Wallace, M.D., December 25, 1956.
Llewellyn Gilmer Wolff, M.D., September 29, 1956.
Divonis Worten, M.D., May 24, 1956.

Following the reading of the Necrology Report, the House of Delegates of the Oklahoma State Medical Association, Opening Session, was adjourned to recon-
vent at 8:00 p.m.

Reported by Bobbie Iselin

Deaths

PATRICK S. NAGLE, M.D.

1902-1957

Patrick S. Nagle, M.D., Oklahoma City surgeon, died May 8, 1957, in the Veteran's Administration Hospital at the age of 54.

Doctor Nagle was born November 10, 1902, in Kingfisher. He graduated from Kingfisher highschool in 1920 and the University of Oklahoma in 1924. He graduated from the University of Oklahoma School of Medicine in 1928.

Upon completing an internship at the University of Minnesota hospital, he returned to Oklahoma and entered private practice in 1931. In 1942, Doctor Nagle enlisted in the Army Medical Corps where he attained the rank of major.

Doctor Nagle was a member of the Sons of American Revolution, Chamber of Commerce, Sequoyah club, 89'ers association and Sigma Chi fraternity. He also was a member of the Oklahoma County Medical Society, the Oklahoma State Medical Association, the American Medical Association and the American College of Surgeons. He was certified by the American Board of Surgery and was an associate professor of surgery at the OU Medical School.

Doctor Nagle was also a member of the Oklahoma City Surgery society and the Blue Cord association.

New Principles of Medical Ethics

The House of Delegates of the American Medical Association at its New York City meeting last month adopted a new set of Principles of Medical Ethics.

These new Principles have been consolidated into ten sections and supersede the cumbersome and somewhat ambiguous principles that previously existed.

Elsewhere in the *Journal* these Principles are printed in insert form and in such a way that they can be framed.

In many respects the Principles of Ethics are as important in the practice of medicine as is the science of medicine.

It is hoped that each physician will carefully read these principles and rededicate himself to them.

The taking of the Hippocratic oath at the time of graduation needs confirmation from time to time just as do all other principles by which we live, be they of church or country or home.

Rabies Prophylaxis in Man

In June, 1957, the *Journal* reprinted an excellent story about rabies written by Berton Roueché in the *New Yorker*. The problem of what to do when a patient is exposed is an ever repeating one for pediatricians, general practitioners, and internists. The set of circumstance surrounding the incident of one bite is never the same as another. The information on which decisions must be based changes as our knowledge of the subject increases. Karl Habel,¹ Chief, Basic Studies Section, Laboratory of Infectious Diseases, National Institute of Allergy and

Infectious Diseases, has reviewed the subject and the following has been gleaned from the review.

Studies in experimental animals have shown that after rabies street virus is introduced into the gastrocnemius muscle of mice it can be demonstrated at the sight of inoculation for four days but by the second day is already present in the sciatic nerve. By the fourth day it is in the central nerve system. Once the virus reaches the central nervous system it multiplies and spreads peripherally along nerves including those which supply the salivary glands and is excreted in saliva. There is no evidence that viremia is part of the usual pathogenesis of rabies.

Experimental evidence indicates that virus is not likely to be in the saliva of a rabid animal until a few days before it develops clinical rabies *except in bats, especially vampire bats, who may carry the virus in their salivary glands for months while they are symptom-free*. While a dog under observation should not be killed for laboratory examination until definite signs of rabies are present, a bat should be killed immediately for such examination. The whole un mutilated head of the animal to be examined should be removed and kept in *wet* ice until the examination can be carried out.

The ability to actively immunize an exposed individual against rabies is possible only because of the long incubation period, the slow rate at which the virus travels to the central nervous system. In bites about the neck, face and head and in deep lacerating bites, any place on the body, the incubation period may be much shorter. The vaccine should be started immediately. Recently the high efficacy of the use of antiserum has been demonstrated. Antiserum alone is superior to vaccine alone but best results are obtained using both. Still better results are obtained if some of the antiserum is injected locally to infiltrate the site of

1. Habel, Karl: Rabies Prophylaxis in Man. *Pediatrics*, 19:923 (May) 1957.

the area of the bite. In view of the results of experimental and field trials, it is now thought that *antiserum plus vaccine provides the best prophylaxis of rabies in man and the combination should always be used in cases of severe exposure*. Recent experiments indicate that on certain dosage schedules rabies antiserum may interfere with the antigenicity of the vaccine. It has, therefore been recommended that the entire calculated dose of antiserum be given in a single dose at the start of treatment and this should be followed with at least 14 daily doses of vaccine.

Serious complications of vaccination is always possible. A discriminate use of vac-

cine is the only way to reduce their number. The vaccine should not be given except where there is a definite indication. The mere presence of a rabid animal in a household is not an indication to immunize all the family. Demyelinating destruction of the patient's own central nervous system appears to be due to hypersensitivity to the brain tissue in the vaccine. Efforts are being made to prevent this by growing the virus on other media. One, an inactivated-virus vaccine produced from rabies-infected duck embryos has been licensed for use in man.

The chart which follows should replace the one published in the *Journal* in February 1956.

TABLE I

Indications for Specific Treatment After Exposure to Rabies*

Nature of Exposure	Condition of Biting Animal		Recommended Treatment
	At Time of Exposure	During Observation Period of 10 Days	
I. No lesions; indirect contact only	Rabid		None†
II. Licks: 1) unabraded skin	Rabid		None†
2) abraded skin, and abraded- or unabraded mucosa	a. healthy b. healthy	Healthy Clinical signs of rabies or proven rabid.	None Start vaccine at first signs of rabies in animal
	c. signs suggestive of rabies	Healthy	Start vaccine immediately; stop treatment if animal is normal on fifth day after exposure.**
	d. rabid, escaped, killed, or unknown		Start vaccine immediately
III. Bites: 1) simple exposure	a. healthy	Healthy	None
	b. healthy	Clinical signs of rabies proven rabid.	Start vaccine at first signs of rabies in animal.
	c. signs suggestive of rabies	Healthy	Start vaccine immediately; stop treatment if animal is normal on fifth day after exposure.**
	d. rabid, escaped, killed, or unknown; or any bite by wolf, jackal, fox or other wild animal.		Start vaccine immediately.
2) severe exposure; (multiple; or bites on face, head, or neck)	a. healthy	Healthy	Hyperimmune serum immediately; no vaccine as long as animal remains normal.
	b. healthy	Clinical signs or rabies or proven rabid.	Hyperimmune serum immediately; start vaccine at first sign of rabies.
	c. signs suggestive of rabies	Healthy	Hyperimmune serum immediately, followed by vaccine; vaccine may be stopped if animal is normal on fifth day after exposure.
	d. rabid, escaped, killed, or unknown; any bite by wild animal.		Hyperimmune serum immediately, followed by vaccine.

*From Report of Expert Committee on Rabies, W.H.O., p. 12. This Table has been slightly revised and expanded in Report in the Third Session of the Expert Committee on Rabies. Wild. Hlth. Org. Techn. Rep. Ser.—to be published.

†Start Vaccine immediately in young children and in patients for whom a reliable history cannot be obtained.

**An alternative treatment would be to give hyperimmune serum and not start vaccine as long as the animal remained normal.

Note: To be effective hyperimmune serum must be given within 72 hours of exposure. Dose: 0.5 ml/kg of body-weight.

These indications apply equally well whether or not the biting animal has been previously vaccinated.

Scientific Articles

SMALL BOWEL OBSTRUCTION

The value of the scout film of the abdomen as a differential diagnostic agent between simple and strangulated obstruction.

CLAUDE J. HUNT, M.D., F.A.C.S.

THE AUTHOR

Claude J. Hunt, M.D., F.A.C.S., was graduated from the University of Kansas Medical School in 1915 and now makes his home in Kansas City, Missouri, where his practice is limited to his specialty of General Surgery.

Doctor Hunt has been certified by the American Board of Surgery of which he is a Founder Member and is past president of the Jackson County Medical Society.

Doctor Hunt holds membership in the American Goiter Association of which organization he is Past President, Western Surgical Association, Central Surgical Association, Pan Pacific, Southern and Southwestern Surgical Associations, and Internal Surgical Society.

Peristalsis

The peristalsis of the small bowel is quite different from that of the colon. In the small bowel the peristalsis is from proximal to distal, in a rhythmic and consecutive manner; while in the colon it is segmental, one segment suddenly expelling its contents into the next distal segment. For example, the cecum and ascending colon expel by one violent painless contraction its contents into the right transverse colon. The stimulus to evacuation is initiated by the sudden deposit of the lower sigmoid contents into the rectal pouch. A failure to respond to the call of nature results in dehydration of the material and a hard dehydrated stool. Repeatedly ignoring such impulses of nature for evacuation is the contributing factor to irregularity.

Clinical Manifestations

The peristaltic phenomenon of the small bowel accounts for the characteristic symptomatology of simple nonstrangulating small bowel obstruction.

The clinical indications of obstruction of the small bowel are definite and characteristic. They are unlike any other form of abdominal colic and present none of the

Small bowel obstruction presents different problems than obstruction of the colon. In small bowel obstruction the causative agent is usually not an intrinsic lesion and an operation for primary releasing of the obstruction is to be desired as early as possible; but when there are electrolyte disturbances, blood volume changes and an extensively distended small intestine, immediate surgery sometimes becomes a dangerous procedure. Naso-gastro-intestinal intubation with decompression and with restoration of physiologic equilibrium becomes an important preoperative necessity. This, of course, is assuming that the bowel is simply obstructed, without vascular damage, and that strangulated obstruction is not present or imminent. In the latter case no great delay can be entertained and immediate operation is urgent.

In the colon, however, it is almost always surgically unsound to attempt primary resection of a lesion in the presence of acute obstruction. The procedure of safety is to surgically decompress the colon and prepare it for subsequent resection.

We, therefore, desire if possible, to distinguish between simple small bowel obstruction, in which there is no vascular damage, and strangulated obstruction where vascular impairment is the paramount issue.

It must be emphasized that obstruction of the small bowel, regardless of its nature, must be surgically released. There is perhaps one exception and that is the obstruction immediately following operation for inflammatory disease, which can be decompressed by intestinal intubation and a release of the obstruction often obtained, as the reaction subsides.

manifestations of localized disease or inflammatory reaction.

The symptoms and physical signs of simple small bowel obstruction may be divided into three distinguishing manifestations. They may well be called the "big three" of small bowel obstruction. They are pain, peristalsis and borborygmus.

Pain in simple obstruction of the bowel is peculiar unto itself. It is in no way related to any other type of abdominal pain. It is not confined to any quadrant of the abdomen and has little or no localized tenderness or rigidity. It is, therefore, not a localized inflammatory process or localized colic. It is quite the contrary; it is generalized, diffuse and not associated with tenderness or muscle spasm. It is not continuous, but is spasmodic in character. It starts with intestinal cramps, diffuse in character, increasing in intensity and finally culminating in extreme severity, only to subside and recur in a short time. No other form of abdominal colic has this characteristic of diffuseness, periodicity and relatively negative physical observation. Only in strangulated obstruction or adhesive bands attached to the anterior parietal peritoneum will there be localized tenderness or muscle spasm.

Corresponding with this periodic spasm of pain there occurs synchronously visible peristalsis and audible intestinal sounds of particular diagnostic significance.

Peristalsis is sometimes visible in early obstruction, in patients whose abdominal wall is not too thick and obese. Observations should be made for its presence as the pain progresses, and often waves of peristalsis can be seen to pass across the abdomen. It subsides with the cessation of pain. It is significant and diagnostic if present, but not as frequently observed as the colicky pain and borborygmus.

Audible sounds of borborygmus are synchronous with intestinal colic and visible peristalsis. They increase in intensity, finally ending in a loud metallic sound with the cessation of colic and peristalsis. It may be audible to the patient or heard by auscultation. Pain and borborygmus are distinctive of obstruction and not commonly found in other forms of abdominal colic. In advanced obstruction, pain and

peristalsis may be absent and the abdomen silent, because of distention and paralysis of the bowel.

These three clinical entities that constitute the "big three" of non strangulating obstruction of the small bowel are always present and are usually not appreciated sufficiently early.

Vomiting is of significance when it occurs with abdominal colic and its associated symptoms. With the first onset of obstruction, vomiting may occur immediately as a reflex response. It is related to the initial shock and not regurgitant in character. It is a protective action of nature to put the bowel at rest and to empty it of its accumulated contents. This may even occur in obstruction of the colon as a reflex physiologic manifestation. Early regurgitant vomiting occurs only in high bowel obstruction. Regurgitant vomiting is associated with progressive proximal bowel distention but in low bowel obstruction it takes a variable period of time, depending on the level of the obstruction, for it to occur.

High bowel obstruction produces early prostration, profuse emesis, dehydration and severe colicky pain. There is great loss of fluids and electrolytes, and the urinary output is scanty. Distention is minimal, not well seen on an x-ray film.

The passage of gas or the evacuation of the bowels, either spontaneously or by enema, may occur and give a false sense of security as to bowel patency. This has been emphasized by Wagensteen and Goehl.¹ It is present often in complete bowel obstruction and is reflex in character and another example of nature attempting to put the bowel at rest. It must be remembered that there is nothing physiologically or anatomically wrong with the bowel distal to the obstruction and it may function in an evacuating capacity with or without stimulation. Therefore, one should not be lulled into a false sense of security by the appearance of a good evacuation.

External evidence of strangulation is positive indication of obstruction and the presence of scars of a previous abdominal operation or abdominal distention are significant, when associated with the clinical symptoms of obstruction. Distention in

simple obstruction is symmetrical but in strangulated obstruction it is more localized and is most apparent over the loop of distended bowel. There is continuous pain, not of a colic type. There is tenderness and muscle spasm and evidence of shock, a fast pulse and an increased white blood count.

Value of Abdominal Roentgenogram

Although gaseous shadows in the small bowel have been known for over thirty years to be of some importance as an indication of disturbed continuity, the profession is still not sufficiently impressed with their diagnostic value to institute an early roentgen study in cases of suspected obstruction of the small bowel. Schwarz² in 1911 called attention to the gaseous shadows seen in the small bowel in the presence of obstructive lesions. He advised the use of an opaque medium as a confirmatory diagnostic agent. In 1914 Case³ described gas shadows in the small bowel as a diagnostic aid in the diagnosis of small bowel obstruction. Kloiber,⁴ in 1919 was the first to state that the diagnosis of small bowel obstruction could be made by the gaseous shadows on a roentgen negative and that a contrast medium was not necessary for confirmation. He demonstrated that gas shadows in the small bowel are abnormal and indicative of obstruction.

The typical transverse pattern described by Case is not necessary for a diagnosis of obstruction. A collection of gas in the small bowel in an adult may be considered pathognomonic of intestinal interruption. In very small children gas may be seen in the small bowel and have no diagnostic significance. The accumulation of gas after obstruction is not a late development; it is seen soon after the onset of the obstruction, being easily demonstrable as a rule in four or five hours. The distribution of gas in the small intestine is indicative of the type of lesion present. In a case of simple obstruction the distended intestines may be centrally located and transverse to the long axis of the body, while in the presence of strangulated obstruction the dilated loop or loops of bowel may assume no definite pattern and distention of the proximal bowel is slow to develop. If the walls

separating the loops are thick, it signifies the presence of fluid or exudate. Collections of gas in the large intestine are quite in contrast to collections in the small bowel; the pattern is that of the colon, the bowel wall is thicker, and haustral markings are present.

The stepladder appearance of simple distention of the small bowel indicates advanced obstruction and is associated with a variable degree of abdominal distention.

Valvulae conniventes as emphasized by Lockwood⁵ are seen with simple obstruction and not with advanced strangulation obstruction. Gas is present and can be demonstrated long before the characteristic pattern has developed. Thus it may be said fairly accurately that the roentgen ray can make possible an early diagnosis of small bowel obstruction, and that it can indicate the location and probably nature of the obstruction.

From an abdominal roentgenogram one can readily determine whether the distention is in the large or small bowel. If it is in the large bowel it is usually a closed loop obstruction, the ileocecal valve preventing regurgitation into the ileum. It shows a gaseous colonic pattern with haustral markings. If it is in the small bowel the type and character of the distention depend upon the nature of the obstruction and from the pattern of distention, the urgency of the situation becomes apparent.

When distention occurs postoperatively there may be a question as to whether mechanical obstruction or paralytic ileus is present. In the former event, the small intestines are obstructed; in the latter there is distention of both the small and the large bowel. A roentgen film shows the nature of the gaseous distention and is a valuable aid in distinguishing between the two conditions. If the obstruction is mechanical, the small bowel is distended and the colon is empty; if ileus is present, gaseous distention is apparent in both the small and the large bowel. Repeated films may be necessary to determine the certainty of ileus.

A simple adhesive band producing proximal distention of the bowel results in no immediate vascular damage, and in advanced obstruction operation may be de-

ferred until rehabilitation of the patient can be accomplished and intestinal decompression established. A loop obstruction, volvulus or strangulation, on the other hand, demands immediate operative intervention because of devitalization of bowel and subsequent intestinal gangrene. With such obstruction the bowel does not assume the transverse position to the long axis of the body but forms one or more distended loops, with no apparent pattern and with little or no proximal distention until the obstruction has been present for many hours. The reason for the delay in distention of the proximal bowel is not understood, but it is probably due to the associated hyperemia, edema and neurogenic imbalance.

The simple adhesive obstructions are the most common types involving the small intestines, and their presence can be detected early by roentgen study. The pattern is characteristic, and the sequelae of chemical imbalance, dehydration and distention are in proportion to the extent and level of the obstruction.

Obstructions of the small bowel frequently occur in association with inflammatory lesions within the abdomen and usually present the characteristic pattern of a progressive proximal distention in which the viability of the bowel is not in jeopardy. With this type of obstruction it is not often necessary to intervene surgically, as the condition results from localized inflammation and edema which narrow and constrict the adherent bowel to the point of obstruction. Surgical treatment is attended by great danger in the inflamed edematous bowel and may lead to perforation or extension of the infection. Intestinal decompression by the Miller-Abbott tube reduces distention and lessens the edema and hypertrophy proximal to the obstruction. With intubation and appropriate systemic measures, recovery will likely occur without resort to surgical measures. Enterostomy is not required, as a more effective decompressive measure is found in intestinal intubation. Enterostomy is ineffective, since it drains only a limited segment of the bowel or a few distended loops and has many hazards. I have discarded the procedure.

Occasionally an obscure hernia within the abdomen arouses the suspicion of intestinal obstruction, to be confirmed by a roentgen film. A Richter's hernia is very similar. The picture resembles that of a simple obstruction, with the added danger of segmental gangrene of the bowel.

In patients of advanced years on whom no previous abdominal operations have been performed, the possibility of a colonic lesion must be given careful consideration. This can be most effectively determined by a barium enema. Such a lesion having been excluded, some variety of small bowel obstruction must be considered.

Intestinal Intubation

The Miller-Abbott tube was used in the nonsurgical treatment of obstructions due to localized inflammatory processes. It was likewise used as an adjunct in more than one-half of 87 operative cases, either as a preoperative or as a post-operative measure. Clinical and roentgen evidence of post-operative small bowel obstruction has frequently been treated by decompression with the Miller-Abbott tube without operation.

Although the Miller-Abbott tube has fallen into disrepute in many sections of the country because of the difficulty of passage, it is beneficial and is employed by us when we deem it advisable. We consider the procedure of passing the tube to be a function of the roentgenologic department, which has voluntarily assumed this obligation and has had excellent success.

The tube is indicated in cases of simple adhesive obstruction with extensive proximal distention. It is valuable in cases of early obstruction to prevent postoperative ileus and to hasten restoration of an already partially distended bowel. It is contraindicated as a preoperative therapeutic measure in the presence of loop obstructions, volvulus, or strangulated obstruction. Immediate surgery is imperative because the bowel is in jeopardy. It may be valuable as a postoperative agent to prevent further distention and to hasten restoration of bowel tone.

The importance of competent roentgenologic assistance, therefore, in evaluating the nature of the obstruction of the small bowel

and the need for immediate operation, deserves emphasis. It is well known that, in some instances of advanced simple obstruction, surgical intervention is more safely and effectively performed after physiologic rehabilitation and intestinal decompression by intubation have been satisfactorily accomplished.

External Strangulation

Rarely is there any prolonged delay, because the patient is aware that the long-existing hernia is no longer symptomless but has suddenly become an irreducible mass, firm and hard. The abdominal pain and symptoms are associated with this persistent protrusion. Recognizing the significance of this situation the patient promptly calls his family physician and operative intervention is instituted usually before gangrene of the bowel intervenes.

I have not been sympathetic with attempted medical reduction of strangulated hernia. Even if it is successful, nothing permanent has been done to prevent a recurrence, and the viability of the reduced bowel is unknown. It is better to reduce the bowel under direct vision, carefully inspect it for adequate circulation and repair the hernial defect. Then, and only then, can one be certain of the viable condition of the bowel, and only then has something been done to prevent a recurrence of the catastrophe. I, therefore, do not attempt manipulative reduction of any strangulated hernia, but advise immediate surgical repair.

Mesenteric Thrombosis

Mesenteric thrombosis is in reality an obstruction, since peristalsis is abolished and bowel gangrene is imminent. The symptoms are different, as acute sudden pain may usher in the catastrophe. The roentgen picture shows gaseous distribution in the small bowel and perhaps also in the large bowel. With sudden onset, continuation of the pain and a distribution of gas in the small intestine, abdominal exploration should be done. Segmental resection may be possible, but too often the entire supply of the superior mesenteric artery is involved and nothing can be done.

Intrinsic Obstruction

Intrinsic lesions obstructing the small bowel are due to occasional obstruction from a neoplastic lesion. The symptoms are those of progressive intestinal distress with subsequent bowel obstruction and progressive abdominal colic from a gradual occlusion of the lumen by the neoplastic growth.

Surgical management of gall stone obstruction depends on the local condition of the obstructed bowel. If the stone can be dislodged it should be pushed upward to an uninvolved area of the bowel and removed through a longitudinal incision, which is closed transversely. If edema and reaction prevent dislodgment of the stone, resection with anastomosis is advisable. Incisional removal of a gall stone through an indurated edematous bowel is hazardous. It will not heal. We have had five obstructions of the lower bowel from a gall stone which were surgically removed and two impacted stones in the rectum requiring surgical removal.

Neoplastic lesions require wide resection when possible. If inoperable, anastomosis should be made between the proximal and distal limbs of the bowel around the lesion. We have encountered only 7 neoplasms of the small bowel as compared to 485 resections for cancer of the colon and rectum.

Summary

The symptoms of the two types of small bowel obstruction have been clinically described and the differential diagnosis from colon obstruction has been emphasized. It has been urged that all early obstructions of the small bowel should be operated upon at once. Late simple obstructions, associated with marked bowel distention and systemic physiological changes, where the vascularity of the bowel is unimpaired, intestinal intubation and physiological restoration of impaired physiology is advised.

The value of the scout film of the abdomen as a diagnostic agent of small bowel obstruction and as a method of determining the level of the obstruction and a means of distinguishing between a simple and strangulated obstruction is emphasized.

Mention is made of the distinguishing features between the various types of obstruction. Methods of differential diagnosis are discussed and the urgency of the situation and the procedure we follow are described.

Intrinsic lesion, neoplastic and from gallstones are mentioned from the point of surgical treatment.

Personal conception of the management of external strangulated hernia is discussed.

Read before the Oklahoma Chapter, American

Academy of General Practice, Oklahoma City, Oklahoma, Biltmore Hotel, February 4, 1957.

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Clinical Pathological Conference

held for the program of the Washington's Birthday Clinic, February 22, 1957*

Patient: Mrs. N. Y., 72 year white female

This patient had had vague gastro-intestinal symptoms for about two years before admission to this hospital. At times, immediately after having a bowel movement, she would feel that she had to have a bowel movement again. She also had the feeling of some intestinal distention. Her colon was always palpable. She had had an upper gastro-intestinal tract fluoroscopy a few months before admission to the hospital, and at that time a diagnosis of "chemical gastritis" was made. Eating of greasy foods or cabbage caused upper abdominal distress and also left a greasy taste in her mouth. The upper abdominal distress was slightly relieved by antacids. This distress tended to come on about one hour after meals. The size of the meal was not important. Eating or lying down did not seem to precipitate an attack of upper abdominal pain. She had had no vomiting.

On the day of admission at 11:15 a.m.,

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the patient had a sudden loss of consciousness from which she slowly recovered over a period of two hours. During this two hour period she began to complain of abdominal pain and pain in the legs. The abdominal pain was described by the patient as being of intermittent cramping nature. At this time she had an absence of pulsation of the right dorsalis pedis artery (history of fractured hip with nailing). There was an absence of reflexes of the right lower extremity. Two hours after the original acute episode the patient had an aphasia and also weakness of the right leg. Later weakness of the left leg developed. These symptoms completely subsided about four

*Twenty-Fourth Annual Meeting of The Oklahoma City Internists' Association.

hours after the original acute episode except for residual coldness of the right foot. After these symptoms had subsided the patient had difficulty in lifting her legs and feet, and there was numbness throughout the legs. Shortly after the beginning of the pain at 11:15 a.m. the patient vomited some reddish material which was considered to be either blood or questionably a portion of a red pill.

Physical examination at the time of admission (3:30 p.m.) to the hospital revealed the blood pressure to be 168-70, pulse 92, respiration 20, temperature 100.-8°F. The patient was alert and cooperative and had a clear sensorium. She appeared well developed, well nourished, and appeared to be approximately the stated age of 72 years. At the time of physical examination she did not appear to be either acutely nor chronically ill. She did appear to be very restless, first sitting and then lying in bed. Examination of the eyes revealed bilateral opacities of the lenses. The lungs were clear to auscultation and percussion. A grade I systolic blowing mitral murmur was present. No other pertinent changes were noted about the heart. No evidence of abdominal distention was present. There was a slight tenderness of the muscles of the extremities and the upper abdomen. On the day of admission the electrocardiogram was interpreted as showing an old myocardial infarct. At that time the blood pressure was 140-60; however, during that night it varied from 170-70 to 140-0 in a period of two hours. On the second hospital day the blood pressure appeared to be stabilized at 140-60. On the third hospital day roentgenograms of the abdomen revealed no free air in the peritoneal cavity. A very tortuous and somewhat dilated aorta was noted over the lower dorsal and upper lumbar spine. The kidney shadows appeared normal. There was a ring shadow in the right upper quadrant which was considered to be a calculus in the gallbladder. Degenerative changes in the lumbar spine were seen. A blade plate was noticed in the proximal right femur, apparently from an old healed trochanteric fracture. Additional films on the fourth hospital day revealed the esophagus and stomach to be

normal except for a prominent hiatus hernia which did not completely reduce in an upright position. The stomach was otherwise normal. The duodenal bulb appeared normal. The lower thoracic aorta was seen to be rather markedly widened. On the fifth hospital day the gallbladder was not visualized with a single dose of dye. Roentgenograms of the chest revealed the heart not be enlarged. No pulmonary lesions were identified, although a minimal amount of fluid in the thoracic cavity could not be excluded. On the fourth hospital day examination of the patient revealed no abdominal tenderness and no distress. There was no evidence of abdominal distention. Slight tenderness of the leg muscles was present. The blood pressure in each leg was 180-100. The patient felt better than at any time since the present acute episode.

Laboratory examination on the day of admission revealed the urine to be yellow, clear, and acid; to have a specific gravity of 1.022 and to have no albumin and no glucose. No red cells or casts were seen, and only a few white cells were present. An additional urine examination on the third hospital day was approximately the same. On the second hospital day the hemoglobin was 11.4 gms. per cent. The red blood cell count was 4,190,000. Slight variation of the size and shape of the red cells was noted. The white blood cell count was 8,850 with 90% neutrophils, 8% lymphocytes and 2% monocytes. The blood count two days later was almost identical; this time hemoglobin was 11.6 gms. percent, WBCs 8,200. The VDRL serology test for syphilis on the second hospital day was negative. The following day the NPN was 39 mgs. percent, and serum amylase 7 mgs. percent (normal 20 to 40 mgs. percent). On the fourth hospital day the blood sugar was 124 mgs. percent, and the NPN 40 mgs. percent.

During the morning of the fourth hospital day the patient appeared comfortable and was seen by one of the nurses at 11:00 a.m. At that time she was turned on her side and was noted to be in no discomfort. About 11:10 a.m. the nurse reentered the room and at that time the patient was gasping and had labored type

respiration. By the time the doctor could get to the room at 11:15 a.m. the patient was dead.

ROBERT H. BAYLEY, M.D.: Our 72 year old female subject, according to the contents of the first paragraph, has both upper and lower gastro-intestinal complaints. We later find x-ray evidence of a hiatus hernia of the paraesophageal type that is non-reducible. X-ray studies also reveal ring-like shadow in the gallbladder region and on the fifth hospital day an attempted visualization of the gallbladder showed "non-visualization." If the patient has cholelithiasis, I am going to take the position that the gallbladder lesion is asymptomatic and that the hiatus hernia satisfactorily accounts for the upper gastro-intestinal complaints. Greasy foods delay the emptying time of the stomach and would therefore prolong her indigestion. Since the hiatus hernia does not reduce in the upright position, we have an explanation of why she was not "worse on lying down."

In the second paragraph of the protocol, there are dramatic transient symptoms which I interpret as evidence of transient cerebral ischemia, transient ischemia of the lower regions of the spinal cord, and impairment of blood flow to the lower extremities, particularly the right.

In the third paragraph we find that she had an apical systolic murmur and a day or so was required for stabilization of the blood pressure at levels which can be regarded as satisfactory for a patient aged 72 years. In particular, we note equal pressures of 180-100 in the lower extremities.

In the laboratory findings, I would call attention to the two negative urinary studies, particularly the absence of a hematuria. The electrocardiogram taken on the day of admission is reported as showing evidence of "old myocardial infarction." I have examined this electrocardiogram and believe that the evidence for "old infarction" is based on the absence of an R deflection in the first two precordial leads. QRS transition is abrupt between V-3 and V-4 after which the R deflections are rather prominent and the intrinsicoid deflection appears to be somewhat delayed. I am going to interpret these last mentioned chan-

ges as evidence of left ventricular hypertrophy. In the presence of electrocardiographic evidence of left ventricular hypertrophy, it is necessary to interpret missing R deflections in the first several precordial leads with considerable caution. It is not unusual to have R absent at V-2 and it may be absent at V-1 normally. With conspicuous electrocardiographic evidence of left ventricular hypertrophy, R may be occasionally absent in leads V-1, V-2, and V-3, and in rare instances, absent in leads V-1 through V-4. I am therefore going to interpret this patient's electrocardiogram as displaying evidence of left ventricular hypertrophy without any definite evidence of myocardial infarction. In connection with the present illness, the consideration of acute myocardial infarction is an important one. Sudden loss of consciousness is not particularly uncommon in the more elderly subjects. The acute cerebral ischemia may be directly associated with low cardiac output or "heart shock" or with a serious arrhythmia or with both. Indeed, the acute cerebral ischemia of acute myocardial infarction may lead to more serious cerebral complications than transient loss of consciousness. Cardiac psychosis has been observed and hemiplegia has been reported. It may be argued that an electrocardiogram on the first day of the "heart attack" may show no changes of acute myocardial infarction for in isolated instances two or three days may pass before typical electrocardiographic changes appear. Against this diagnosis, however, is the absence of associated pulmonary symptoms and the difficulty in accounting for the spinal cord ischemia or the impairment of blood flow to the lower extremities. These symptoms are distinctly too early for embolism from a subendocardial thrombosis of the left ventricular cavity. This complication may occur between the end of the first week and the end of the second month. Myocardial infarction therefore appears highly unlikely.

I have selected two of the patient's chest x-rays for presentation, the posteroanterior and the right oblique views. In the former, we commence with an examination of the bony cage. (Figure 1). Generally, it appears normal. In particular, there is

no notching of the lower borders of the ribs. This excludes the diagnosis of coarctation of the aorta. This may be important since ten percent of patients with coarctation of the aorta develop "dissecting aneurysm." We next examine the lung fields. At the right apex just below the level of the clavicle there is a paramediastinal or mediastinal mass. It might be a substernal lobe of the thyroid or some other upper mediastinal tumor. It is in the region of the innominate artery and could therefore represent an aneurysm of this vessel. If it is an aneurysm, with the negative serology, I would judge that its etiology is probably atherosclerotic. It may, of course, represent a dissecting hematoma of the innominate artery. There is an obvious difference in the pulmonary vascular markings of the two lung fields. These markings appear normal throughout the left lung field and are distinctly diminished throughout the right lung field. I am going to interpret this as evidence of obstruction to the right main branch of the pulmonary artery. A thrombosis of this vessel may have occurred. There is nothing in the present illness to indicate the occurrence of an acute pulmonary embolism. Chronic thrombosis of one of the larger branches of the pulmonary artery may be associated with pulmonary hypertension and chronic cor pulmonale. This situation is not present for the electrocardiogram shows left, rather than right, ventricular hypertrophy and the configuration of the pulmonary artery segment is inconspicuous. At the base of the left lung field there is some irregular clouding and the costophrenic angle is obscured. We are told that this represents a "minimal amount of fluid" in the left pleural cavity. I am unable to decide whether the evidence represents an old or recent event and will return to the matter subsequently. We next examine the cardiac silhouette. The level of the diaphragm obscures one-third or more of the ventricular shadow and we can therefore not support or confute the possibility of cardiac enlargement. However, marked cardiac enlargement may be excluded. The border of the ascending aorta can be made out. It is slightly prominent. The aortic arch is distinctly prominent and the de-

scending thoracic aorta sweeps out into the left lung field and turns back rather abruptly behind the left heart border at the level of the left atrial appendage. I do not believe the prominence of the aortic shadow is beyond that which may be ascribed to an uncoiled aorta, or, a tortuous descending thoracic aorta.

Let us next examine the right oblique view. Here, the base of the vascular pedicle at the heart appears distinctly widened and configuration of the arch is of generous size. Above the arch we again see a rounded mass (2.5 cm. diameter) in the region of the innominate artery. We now recall that the fluoroscopic study disclosed "rather marked" widening of the "lower thoracic aorta."

With all this, we are ready to consider the diagnosis of "acute dissecting aneurysm of the aorta." Specifically, medionecrosis cystica is associated with hypertension when pregnancy and Marfan's syndrome are not under consideration, and medionecrosis cystica is the direct etiology of dissecting aneurysm. It permits overexpansion of the vessel. The initial intimal tear usually occurs in the arch and the whole thoracic arch may at once be involved with a dissecting hematoma. We shall suppose that this developed with a sudden loss of consciousness. We shall also suppose that one or both of the major branches to the head and neck were involved in the dissection. Two hours later the patient regained consciousness and complained of severe abdominal pain and distention with symptoms of lower cord ischemia and impaired blood flow to the lower extremities. At this time we may suppose that the dissecting hematoma advanced below the diaphragm to involve the abdominal aorta and probably both iliac arteries. Apparently, the renal arteries were not involved (two negative urinary studies). When the segmental branches of the aorta are involved near the level of the diaphragm, lower spinal cord ischemia occurs. It is to be recalled that these segmental arteries have collateral connections with the anterior spinal artery where they support circulation primarily to the sensory or dorsal regions of the cord.

We now need to invoke an apparent

"decompression of the dissecting hematoma." This might occur if the dissecting hematoma were to re-enter the lumen of the aorta through a second intimal rupture. Since re-entry is usually distal from the initial intimal tear, we will suppose that it may be near or below the level of the diaphragm. The dissecting hematoma returns to the aortic lumen in only a minority of instances and readjustment of blood pressures and flow may occur without the phenomenon.

In the last paragraph of the protocol, we find that the patient died abruptly on the fourth hospital day. We may suppose that this was on the sixth hospital day since the patient is described as having an attempted gallbladder visualization on the fifth hospital day. If our diagnosis of dissecting aneurysm is correct, sudden death is the rule when the dissecting hematoma ruptures freely into one of the body cavities. In this connection, let us suppose that "weeping" occurred into the left pleural cavity and thus accounted for the chest x-ray findings at the base of the left lung field on the fourth hospital day. With rupture into the left pleural cavity, the cavity would rapidly fill with blood as the patient became exsanguinated and gasping respirations would be in evidence during the last several minutes of life. This is somewhat of a "long shot" because dissecting aneurysm may rupture into the pericardial cavity, into either pleural cavity, into the posterior mediastinum, or into the retroperitoneal space. Nevertheless, the evidence is suggestive and I am going to hold to the point of terminal rupture into the left pleural cavity.

We are now ready to summarize a final diagnosis. Hypertension with slight to moderate left ventricular hypertrophy and medionecrosis cystica. Dessecting aneurysm of the arch and descending thoracic aorta, of the abdominal aorta and the iliac arteries, of the innominate and left common carotid arteries and of the segmental branches of the aorta in region of the diaphragm. Terminal rupture of the aneurysm into the left pleural cavity. Hiatus hernia of the para-esophageal type, and probably cholelithiasis. Old right pulmonary artery thrombosis.

In conferences of this kind I always like

to take as many physicians as possible along with me. Therefore, if anyone has a strong opinion not in essential agreement with the above diagnosis, we will accept an expression of it at this time . . . Apparently not, so I will ask Doctor Snoddy to present the postmortem findings.

DOCTOR W. T. SNODDY: At autopsy the most important changes noted were within the aorta. There was a dissecting aneurysm extending throughout the entire length of the aorta and into the iliac vessels. The dissection appeared to begin about 5 cm above the aortic valve. The dissection did not extend up the great vessels of the arch of the aorta, however, clotted blood was present between the layers of the wall of the aorta near the orifices of the great vessels of the arch. The dissection did not involve the superior or inferior mesenteric arteries or the celiac artery and did not involve the renal arteries. The dissection did extend into the iliac arteries and also involved most of the lumbar or segmental arteries. Within the thoracic aorta particularly there was a large amount of clotted blood between the dissected layers of the wall of the aorta. This large area of separation produced marked thinning of the outer portion of the aorta and a perforation of the aortic wall was seen on the left side just above the diaphragm. This perforation measured about 1.0 cm in diameter. The left pleural cavity contained 1500 cc of liquid and clotted blood. Other less important findings at the autopsy included an esophageal hiatus hernia. The opening within the diaphragm measured 2.5 cm in diameter. The stomach did not protrude through this hiatus hernia at the time of autopsy. The mucosal surface of the stomach revealed no scars or foci of ulceration in the cardio-esophageal area. There was an ulcer of the stomach just above the pylorus on the lesser curvature and this ulcer measured 0.9 cm across. Four mixed faceted gallstones were present within the gallbladder. It would seem to me that the gallstones and the small prepyloric gastric ulcer, rather than the hiatus hernia, would better explain upper gastrointestinal complaints. The heart weighed 280 grams and revealed no evidence of a healed or recent infarct. The wall of the

left ventricle was 1.3 cm in thickness. No evidence of left ventricular hypertrophy was seen.

There was no pulmonary embolus and no definite lesion was seen in the upper lobe of the right lung. The pulmonary artery and its branches showed no lesion. The right paramediastinal or mediastinal mass could be explained by clotted blood expanding the wall of the aortic arch in its right superior portion.

The only pertinent microscopic finding was present within the aorta. Sections of the aorta revealed cystic medial necrosis with degenerative changes surrounding the cystic spaces. Cystic degenerative changes of the media have been considered to be the predominant underlying lesion of dissecting aneurysms of the aorta.

Treatment of this disease has been symptomatic and supportive until fairly recently. An ingenious method for surgical treatment of this disease has been devised by Doctor DeBakey. He creates a re-entry passage into the main aortic lumen thus allowing blood to flow from a double aortic lumen above into a single lumen below. He has had considerable success in treating patients for dissecting aneurysms by this method. Doctor Munnell is present in the audience and possibly he could discuss the surgical treatment.

Anatomic Diagnoses:

Idiopathic cystic medial necrosis of aorta.

Dissecting aneurysm of the aorta throughout the length of the aorta with perforation and left hemothorax.

Atelectasis of lung, left.

Cholelithiasis and chronic cholecystitis

Gastric ulcer

Esophageal hiatus hernia.

DOCTOR H. T. AVEY: Were there any evidences of Marfan's syndrome? Did the patient have long "spider fingers"?

DOCTOR SNODDY: No evidence of this syndrome was noted.

DOCTOR E. R. MUNNELL: Vascular surgery has recently entered the field of dissecting aneurysm with an operation proposed by DeBakey. (DeBakey, M.E., Cooley, D., and Creech, O: Dissecting Aneurysms of the Aorta, Surgical Considera-

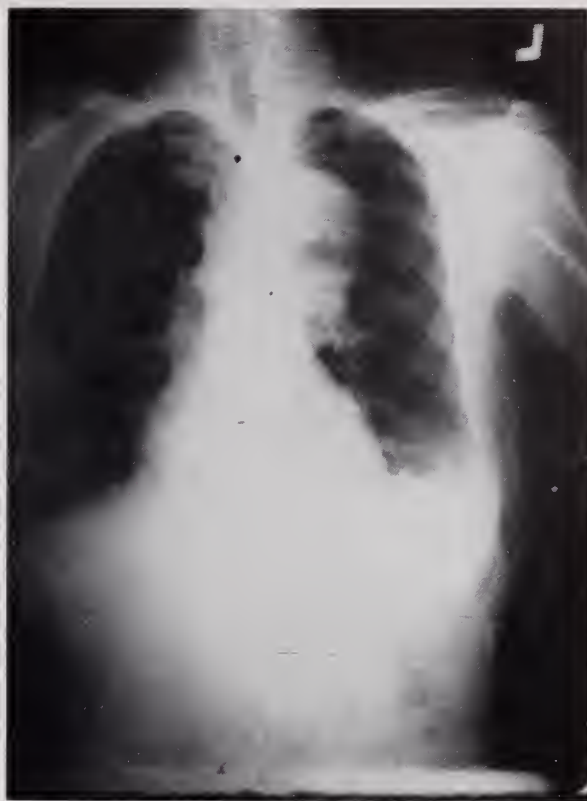


Figure 1. P. A. View of the chest. Note the enlarged outline of the aortic arch, see text.

tions. *Annals of Surgery*. 142:586, 1955). This operation does what nature does in some cases; it produces a re-entry window for the dissecting hematoma. Thus, the procedure consists of division of the descending thoracic aorta just above the diaphragm, creation of re-entry site through the intima, closure of the distal aneurysm opening and anastomosis of the ends of the aorta. Operation should be done at the earliest opportunity and a very satisfactory percentage of salvage can be realized.

The x-ray of the chest shows a rather striking reduction of the bronchial vascular markings of the right lung. A possible explanation is an actual blockage of the right main pulmonary artery by the aneurysmal enlargement of the ascending aorta. Anatomically, after the pulmonary artery bifurcates, the right main pulmonary artery passes behind the ascending aorta between the aorta and the right main bronchus. One could speculate that the enlarged aorta compressed the artery at this site and thus the abnormality noted on the x-ray.

DOCTOR BAYLEY: I had considered Doctor Munnell's suggestion regarding obstruction of the right branch of the pulmonary artery. The x-ray evidence of involvement of the ascending aorta was not striking. If pulmonary vascular compression had occurred at the ascending aorta, I would have expected *increased* markings in the right lung field due to pulmonary vein compression.

Finally, not all patients die shortly after the development of acute dissecting aneurysm. After they recover they may

live for years and present the picture of healed dissecting aneurysm. This clinical picture resembles that of luetic aortitis with aneurysmal deformity of the aorta and insufficiency of the aortic valve. The dissecting hemotoma does not directly damage the aortic valve but deforms the valve ring so that the diagnostic murmur of aortic insufficiency is present. When this combination is found in a patient with a negative history of syphilis and with a negative serologic test for syphilis, the diagnosis of healed dissecting aneurysm may be suspected.

Are You Facing a

RADIATION HAZARD?

P. E. RUSSO, M.D.

With the beginning of the Atomic Age Radiobiology has become a science of major importance. In fact, the survival of the human race may depend on our knowledge and understanding of the effects of radiation on living and non-living matter. It has been known for over 60 years—since man produced the first x-rays and later isolated radium products—that this form of energy is a double edged sword. Because of its tremendous boon to civilization and mankind, we must avoid if possible, its dangers which are devastating and lethal.

Man has been exposed to radiant energy in his environment since the beginning of time. He has been able to survive successfully exposure to cosmic rays from the sun and radio active substances found in the earth and sometimes within our body, such as K⁴⁰. With the medical and industrial use of x-ray machines and radium products the exposure to radiation has extended to a fairly large segment of the population of the civilized world. In this field of endeavor there are many martyrs, who taught us the early dangers to excessive radiation exposure. Skin cancers, aplastic anemia, leu-

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Doctor Russo is a member of the American College of Radiology, Radiological Society of North America, American Radium Society, and the American Roentgen Ray Society. He has been certified by the American Board of Radiology.

Doctor Russo is also a member of the Oklahoma County Medical Society, the Oklahoma State Medical Association, which organization he is serving as Vice-Councilor, and the American Medical Association.

This paper was delivered at the Annual Meeting of the Oklahoma State Medical Association in Tulsa, May 6, 1957.

kemia, and bone sarcoma were painfully recorded in the early days of radiology. With the more recent development of atomic power-atomic warfare and radio-active isotopes, exposure to radiation has been extended to a much larger segment of the human race from more powerful man made sources. The benefits to humanity have been in-

creased a thousand fold—but so have the hazards and dangers. Not only are we faced by the danger of sudden destruction, but also by lurking dangers related to gene mutations, acceleration of the aging process, decreasing resistance both to infectious and malignant diseases and a host of other problems. As physicians, these problems require our utmost interest and serious attention. Their understanding and solution will be found in the field of radiobiology. It is the purpose of this paper to bring to your attention some of these problems, which are of immediate concern to us—not only for the benefit of our patients, but also for ourselves and our future generations.

Since the National Academy of Sciences-National Research Council published its report in 1956 on “The Biological Effect of Atomic Radiation”—articles have been published in our daily newspaper—weekly and monthly magazines which are promoting a campaign of fear and hysteria. These articles have a political-social color and are more or less related to the subject of whether or not atom and hydrogen bomb testing should or should not be continued. In order to have public appeal, these articles of necessity must be dramatic, exciting, and made not too boring to the reader with dull facts. The January, 1957, issue of *McCall* magazine may serve as an example. Witness the cover with the title, “Radio Activity is Poisoning Your Children” and on page 28, title, “The Fight For Survival” where this article begins. This was written by Pare Lorentz, a very successful movie critic and movie producer. His main theme was to stop testing of atom and hydrogen bombs and restricting the use of x-ray examination for medical purpose. After reading this article, it is no longer amazing that patients ask what dosage their gonads receive when they have a chest film taken. Should not the physician be the responsible person to decide whether the exposure to radiation should be risked for the patients’ welfare, rather than someone outside the field of medical science?

In the September, 1956, issue of the *J.A.M.A.*, Dr. Shields Warren, in an article, “Longevity and Causes of Death from Irradiation in Physician,” comes to the con-

clusion that radiologists live five (5) years less than their colleagues.

“In a study of the deaths of 82,441 physicians reported in the period 1930-1954 inclusive, it was found that radiologists die on the average, 5.2 years earlier than do other physicians. The nonradiology specialists known to be exposed somewhat to radiation also show definite shortening of life, but less than that of the radiologists. It may be concluded that exposure to ionizing radiation is the predisposing factor in this shortening of life.” He concludes the article by stating, “The degree of precaution against exposure to ionizing radiation employed by some radiologists up to the present time has not been adequate to protect them from deleterious effects. The present standards for protection appear adequate, but more determined effort should be made to live up to them.” Thus it is inferred from this study that exposure to radiation accelerates the aging process and decreases resistance to disease.

With this thought in mind I now wish to refer to an article, by Lauriston S. Taylor: Chief, Atomic and Radiation. Physics Division: National Bureau of Standard. Title, “Radiation Protection for the General Practitioner.” Aug., 1956 *S.M.J.*

The first point he makes is that there are more x-ray units in the hands of the practicing physicians than the radiologist, by a factor or about 10 as shown in Table I.

TABLE I
Use of X-Ray Equipment in the U. S.

	Number	Per Cent
Dentists	65,000	51.6
Practicing physicians	32,000	25.4
(General practitioners)	(20,000)	(15.9)
Hospital and clinic	15,000	11.9
Chiropractors	7,300	5.8
Osteopaths	3,800	3.0
Radiologists	3,000	2.4

“Secondly, the use of diagnostic x-rays by the general practitioner is usually in the role of a secondary tool in comparison with all the other tools and technics that he must master. Hence, it is only relatively rarely that the general practitioner has acquired the highly specialized background in radiologic physics necessary to fully appreciate and understand the technical aspects of radiation protection.”

He stresses the point that unless radiation is used wisely and safely, an increasing pressure to control and regulate its use by state agencies may be expected.

In the medical use of radiation, the problem of protection affects the patient, the physician, his personnel and his neighbors. Since the effects of radiation are always deleterious, every effort should be made to eliminate all unnecessary radiation exposure.

The basic maximum permissible exposure of the whole body to radiation has been set at .3 roentgens per week measured in air. Table 2 gives us some idea what dosage a patient receives from some routine x-ray examinations.

TABLE 2

	Average Radiation Exposures		Per Cent of Ex- aminations
	Average Dose	Gonad Dose	
General radiographic	2.7 r	0.1—10%	52
Fluoroscopic (G.I.)	65 r	20—50%	15
Photo fluorographic (chest)	1 r	1%	33
Extremities, radiographic	2 r	0.1%	10
Chest	0.1 r	1%	37
G. I. series	33 r	25—50%	18
Pregnancy	20 r	10—50%	1

Fluoroscopic examinations result in general in the highest body doses. Utmost precaution is required in the use of fluoroscopy both for the sake of the patient as well as the operator. The fluoroscopist may receive exposure from several sources:

1. Scattered radiation from the patient.
2. Scattered radiation from improper cones and through the Bucky slot.
3. Direct radiation around screen edges.
4. Scattered radiation from walls, ceiling and floor.
5. Direct and scattered radiation on hands.

As a general rule the older the equipment is, or less expensive—the more the exposure factor is increased because of lack of protective devices.

Now I would like to bring to your attention the June, 1956, report by the National Academy of Science and its recommendations in the booklet entitled, "The Biological Effect of Atomic Radiation." In this rather comprehensive report, certain phases of the

radiation problem are brought to our attention. "Any radiation is genetically harmful" and further "that genetic harm is proportional to the total dose." Radiation produces mutations and mutations in general are harmful. "This report recommends that the general public of the United States be protected, by whatever controls may prove necessary, from receiving a total reproductive lifetime dose (conception to age 30) of not more than 10 roentgens of man made radiation to the reproductive cells."

It is stated that over a 30 year period people receive 4.3 r. from natural radiation background, and about 0.1 r. from fall-out (if the weapons testing is continued at the same rate as during the past 5 years). It has been estimated that during the same length of time, an average of 3-4 r. from medical x-rays have practically doubled the exposure to radiation. Therefore, it is their recommendation that the medical authorities of this country initiate a vigorous movement to reduce the radiation exposure to the lowest limits consistent with medical necessity; and in particular that they take steps to assure that proper safeguards always be taken to minimize the radiation dose to the reproductive cells.

I have brought the various phases of this important problem for your thoughtful consideration. We as physicians, will be confronted with various problems of radiobiology, more and more. It is to our interest and that of our patients and friends, that it is within our province to properly utilize this radiant energy in its medical uses. Each of us, regardless of the sources we use—radio active isotopes, fluoroscopes, radiographic or radio therapy machines of any type—must bring up to date our knowledge of radio biology and employ all of the safety devices known and thus avoid laws and other legislative actions in the use of these medical facilities, which might otherwise be imposed on us.

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The PHYSICIAN as NUTRITIONIST

I. PHILLIPS FROHMAN, M.D.

Before anyone can hope to begin to discuss so vast and, I might add, so important a field as nutrition one thing must be clear in our minds from the start — the difference between nutrition and just plain eating.

We Americans have often been referred to as the “best fed” but a very “poorly nourished” people. Yes, just gaze about you; see how well fed even we physicians are, and then remember that the average American adult female is approximately 16 pounds overweight. That is not nutrition, gentlemen; that is improper nourishment and overfeeding. That is eating without rhyme or reason — too many starches, not enough meats, vegetables or fruits — and the all-American breakfast: the usual cup of coffee, a cigarette, maybe a slice of weather-beaten toast, or that all-vitamin, all protein, all mineral food — the doughnut!

Likewise, if a non-specialist in the field of nutrition were to attempt to discuss so vast a subject without a definitive starting point he would be swallowed up and completely submerged in the topic. I believe to get a good anchor hold onto this subject, a beginning with the concept of optimal nutrition might be helpful.

Optimum Nutrition

Optimum nutrition might be described as the intake of nutrient elements in the diet in a proper state of combination or balance, in a proper kind and amount, so that the organism may always meet the varied exogenous and endogenous stresses of life, whether in health or disease, with a minimal demand or strain on the body's natural homeostatic mechanism.¹

We Americans forget that it is impossible for two-thirds of the people of the entire world to procure an optimum diet, and many of these people not even enough calories. We are more fortunate in that optimum diet is in the reach of all of us in this country. We physicians have forgotten one of the most important causes of many of our own and our patient's systemic disorders — improper diet.

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This paper was prepared by Doctor Frohman to be delivered before the Annual Meeting of the Oklahoma State Medical Association in May 1957. Although Doctor Frohman was unable to read the paper personally at the scientific meeting, he submitted the manuscript to the *Journal* for publication.

Physicians must begin to assume the role of nutritionist with greater responsibility in the studies and problems besetting our patients due to their improper eating habits. We must educate the general public in the proper selection and use of food. First, we must know it ourselves, and then impart that knowledge to our patients, both, the “healthy” and the ill.

For over a quarter of a century we have been preoccupied with disease and disease alone, and we have forgotten that all of our patients, except those with ulcers, gastritis, belching, or spastic colons, have an alimentary tract. In our forgetfulness we have allowed the beauty editors of non-professional magazines, beauty parlor operators, and lesser kind to take over the role of educators in the fields of diet, nutrition, and obesity.

Today all of us, physicians and patients, are living in a world of stress, both exogenous and endogenous, with a constant doing and going with very little moratorium for rest and contemplation. With this we are getting into the “rich-living” period of the forty and over years with improper food excesses, drinking of alcoholic beverages, and that “so-good-for-you” advertised cigarette necessary to “live modern”.

Improper nutrition does not show its effects immediately, but the results are insidious in character with a slow day-to-day progress of tissue attrition with a gradual development of disorders without the appearance of noticeable signs of disorder. Often times the signals of obvious signs and symptoms of pathologic damage are delayed until impairment of health is far advanced.

Nutritionists and surgeons interested in nutrition as regards body and tissue repair, tell us that those patients in a state of optimum nutrition recover much more rapidly and with less permanent damage when exposed to trauma and exposure than patients in a state of unbalanced nutrition. Nutritional biochemists and research physicians in the field of nutrition have been working for many years toward the development of ways and means by which man can employ nutrients alone and in various combinations to maintain his health and his natural resistances or defense mechanisms at the peak of their operational efficiency. Correction of nutritional omissions and deficiencies can do much to help repair injuries induced through the years. Recent evidence² shows that certain types of nutritional deficiencies during the early developing period may produce tissue injury that may result in progressive degeneration with the advancement of age.

There are such things as minimum daily requirement standards for guidance in the field of nutrition. These standards are the Minimum Daily Requirements of Specific Nutrients of the U.S. Food and Drug Administration, and the Recommended Daily Dietary Allowances of the Food and Nutrition Board of the National Research Council. These tables are excellent yardsticks for minimum needs. But we physicians must keep in mind always the biologic and metabolic variations in man and, therefore we cannot treat all patients nutrition-wise in the same manner.

The physician, who is acutely aware that patients with disease or traumatic injuries most always have a disturbed metabolism often accompanied by large losses of vitamins, proteins, and other important nutrients, will do well to treat this por-

tion of the patient's being as well as the obvious disease or trauma. All of us know that convalescence from disease, trauma, or exposure is materially shortened and rehabilitation more rapidly achieved if our patients are treated with therapeutic amounts of nutrients. It is difficult to arrive at a definite "optimal nutrition" for all patients with the use of the same slide rule, since all humans vary in their physiologic, biologic and metabolic functions. Their environments, their stresses, and their indulgences likewise vary.

The very magnificence of the body's ability to adapt itself to varying degrees of stress and nutritional deficiencies represents the double-edged sword lulling both patient and physician into a false security as regards body nutrition. The complex adjustments in metabolic patterns enable humans to function over a wide range of nutrient deficiencies and yet present a normal appearance. Nutritional aberrations are slow in producing morbidity or mortality, and mild deficiencies of a dietary essential such as vitamins, proteins or other substances, might go on for a long time before symptoms of deficiency appear.

From what has been said thus far it would seem essential to keep the body tissue at a level of "optimum nutrition" to the best of our knowledge and ability by exogenous dietary means. In this manner when physical or mental stress is encountered the body's defense mechanisms will not be overburdened.

We must constantly bear in mind in our endeavor to create an "optimum nutrition state" that overnutrition due primarily to caloric excess (and I mean overeating) may place just as grave a metabolic burden on the body and may lead to serious disorders of the human physical structure.

Nutrition in the Newborn

We physicians do not have to disturb ourselves about nutrition in the newborn since we are trained to understand and realize that these infants need proper feeding schedules and foods with increasing types of balanced diets after the second or third day of life. And lest we do momentarily forget, the infant's mother will make good use of the telephone to remind

us that the formula and solid foods have not been changed or added to in the past few days. To discuss the problems and various diets in infants would be a waste of your time and an infringement of your generosity of your invitation to speak at this meeting. There are many excellent volumes by good authorities on the subject of infant feeding, and I daresay most of you have these books in your reference library.

Post-infancy Nutrition

Many of us in the practice of medicine, no matter if we are in general practice, pediatrics, surgery or any other specialty, forget that children, once they begin their kindergarten or first grade of schooling, have such a thing as an alimentary tract. Of course when little Johnny comes home with a "bellyache" we begin the usual course of medication after we rule out various acute abdominal conditions such as volvulus, appendicitis, hernia and others. But, after the acute episode is corrected by the grace of nature and a little of our medication, Johnny and his alimentary tract are again forgotten. Mother continues to feed her child anything he wants, probably just to keep him from fussing and fretting, with no thought as to the nutritional value of the food the child ingests. Candy, popsicles, and the constant din of the Good Humor ice cream man's jingly bells — always at meal time—take the place of a good substantial, well-balanced nutritional diet.

In a series of children in my practice picked at random for routine blood counts I found that these children had what I term the typical "candy and popsicle" blood picture. These were apparently healthy children and they were brought to the office for such symptoms as, "no appetite, no pep, cross, listless, cranky, or just routine examination for school." The average hemoglobin content was under 70 per cent, and the average red cell count under 3 million. The differential counts were in normal limits. Three or four of these children had hemoglobin concentration of under 50 per cent. These were supposedly well and healthy children! Gentlemen, this is nutritional deficiency of the worst order. Somewhere along the line the parents and we physicians forgot all about educating

our families about diet and its value to the human body. These children were deeply engulfed in the habit of improper nutrition. I would be most happy to tell you about a magic formula for changing these deleterious food habits. Unfortunately there is no such formula. The best we physicians can hope for is to prescribe a proper diet, proper supplemental nutrients and vitamins — particularly *iron* and iron containing foods — and pray that the mother can entice the child to take the prescribed food and medication. If I had the legal power I would require that all lollipops and other candy and ice cream for children manufactured in this country or imported must contain the minimum daily requirements of supplemental vitamins and iron!

Perhaps many of the cases of the degenerative diseases and the increased number of forty year old patients with coronary thrombosis, may very well be resultant from the nutritional deficiencies of childhood, and the gluttonous excesses of alcohol, cigarettes, and overly rich and improper foods from the twenty-fifth year of life to the fiftieth year or less. Unfortunately, to my readable knowledge no concrete studies in this vein have been accomplished.

The protective mechanisms of the body for maintaining a nutritional constancy are not the same throughout life. In the newborn and infant this protective mechanism increases rapidly throughout childhood, reaches an optimum at early adulthood, and then gradually diminishes with advancing age. Likewise optimal nutrition may vary with the physiologic status at a given age, and may vary with each individual.

The Role of Hunger and Appetite in Nutrition

Hunger is defined by the dictionary as a craving for food, or any strong craving. Appetite is defined as the natural desire for satisfying some want or need, as of food. Carlson³ has defined hunger as a "more or less uncomfortable feeling of pressure and pain referred to the region of the stomach". There are likewise differences in psychic association between hunger and appetite. These two, hunger and

appetite are understood to be sensations or feelings, and are not easily regulated. The desire to partake of food is affected by emotions, environment, temperature, exercise, and others.

What we eat, when we eat, and how we eat, is determined by innumerable socioeconomic conditions and not alone by nutritional demands. National traditions, moral commands, and individual psychological experiences play an important role in nutrition of the peoples in this world. Emotional experiences and the reflections of these experiences on the gastrointestinal tract are taken for granted by their constancy of occurrence, and we humans then restrict or change our diet to produce a sense of well-being after the ingestion of the "right" kind of food. The emotions and food are linked inseparably. Consider Thanksgiving turkey dinner with all the trimmings which is a must on that day. Yet, rarely do we crave or think about turkey the rest of the year. The diet limitations of the Lenten season, and the Passover holidays, are but two of the many periods of diet restriction and selection based on religious background. In this connection the so-called geophagia or the habit of certain tribes to eat clay of riverbanks was considered to replace certain deficiencies in their diet. The habit of small children to eat earth, dirt, chalk and almost anything else that might fit into their mouths—a habit that usually disappears when the child reaches the age of three or four years may be due to diet deficiency or to temperament. Some physicians may see some connection between these bizarre cravings and the fact that earth and ashes can act as absorbents such as kaolin, charcoal or bismuth, and that the floor coverings of chicken coops rich in vitamin B¹², and the antibiotic fungi in soil may have some importance on these earth and dirt eating children and others. The ingestion of plaster covered with lead paint will lead to serious consequences, and the sucking on a hairy teddy bear or other fuzzy object may produce a ball of hair or fuzz in the stomach or intestine of the child that requires surgical removal. These bizarre food habits are called pica. Schizophrenic children may often indulge in coprophagy.

On Obesity

The craving for food, especially for sweets, of obese patients has remained unexplained for a long time. A chronic, moderate hypoglycemia has been thought to be the cause for this craving, although it has been found very rarely in obese persons. There is the possibility that a localized cerebral hypoglycemia and an abnormally low blood sugar of the venous blood, returning from the brain, may play a role in the causation of this craving for sweets. Patients with functional postprandial hypoglycemia due to an island cell tumor of the pancreas are seldom aware, by instinct, that the eating of sweets could at least temporarily alleviate their attacks of sweating, tremor, incoherence or unconsciousness.

Special attention must be called to the lack of appetite in hepatitis, since this symptom often precedes the first objective signs of the disease.

Horror carnis, loathing of meat, is a complaint of so many patients with carcinoma of the stomach. Occasionally, it occurs in patients with gastric achlorhydria without carcinoma.

Nutritional Food Customs

Many of the foods or liquids used by us in this and other countries are merely taken because of family habit or custom, or long-term advertising sales talk. For instance, let us discuss the drinking of milk. We are told, and so are our patients, that milk is a necessity for our bones and teeth and that our bodies profit from its high calcium content if it is ingested during our adulthood. Today we know that milk actually favors the absorption of calcium. It is doubtful whether this is due to the calcium content of the milk. Large doses of milk have no effect on the bones of a patient with osteomalacia, likewise neither does large doses of calcium. But if the calcium intake is held low, and high doses of vitamin D are given osteomalacia improves readily. Since there is quite a bit of phosphorus present in milk causing the calcium of the milk to be transformed into calcium phosphate, which is absorbed with some difficulty, an excess of phosphorous remains forming insoluble calcium phosphate with part of the calcium of other

foods and these foods are then difficult to absorb by the intestinal tract.

Children with tetany, with severe hypocalcemia, become worse if "calcium rich" foods are given, and improve remarkably if milk and other dairy products are excluded from the daily diet.

Today irradiated milk contains large amounts of vitamin D. In spite of this increase in vitamin D and the greater absorption of calcium thereby, milk is not necessarily a wholesome food. The proteins and fats in milk are excellent nutrients for a semistarved people or for infants not on any other food, but it is questionable in my mind and in the minds of research nutritionists whether large quantities of milk should be taken by people who already suffer from an excess intake of fat.

Spinach eating is another nutrition fallacy we have believed to be of great benefit. The oxalate in spinach combines with the calcium present and forms the highly insoluble calcium oxalate, a salt which is completely insoluble and cannot be absorbed.

To delve into the misbeliefs pertaining to nutrition we physicians and our patients have adhered to for so many years would almost fill a volume. Perhaps that which I have touched upon may give you questions to ponder when you next casually prescribe diets, and special foods for your patients. Does the food you want your patient to have do what you want it to do? Will it add calcium? Will it add iron and minerals — after it is ingested? These and other questions should be asked. When you tell patients what to eat — ask yourself why?

In the United States with our high-protein, high-fat, and high-cholesterol diet certain metabolic diseases such as gout, diabetes, obesity, gall stones and premature arteriosclerosis are more prevalent. In those countries where the population lives on a vegetarian diet, one free of purins, gout is quite rare.

Vascular degeneration so prevalent among the diabetics in our portion of the world is practically nonexistent among the poor Chinese diabetics. In other countries where Chinese have acquired wealth and with this a richer diet, diabetes is much more severe.

A low caloric diabetic diet comprised of a larger amount of carbohydrate and vegetable protein with marked decrease in animal protein and fat might be greatly beneficial to western diabetics.

The diet of the Oriental is almost devoid of animal food and therefore the blood cholesterol of these Orientals will be found to be in the range average of 150 milligrams per 100 cc. Whereas here in the United States blood cholesterol levels of 250 to 300 milligrams per 100 cc. are usual.

Today much of our diet is prescribed by the results of animal experimentation rather than the experiences collected at the bedside, the former method being the easier approach. Through television programs patients are told what not to eat, how to get thin, how to get fat, how to get pretty by food and facial makeup, why non-popping crispies are not better than those popped from guns by the manufacturers of cereals, and why rolled oats (for horses or humans) are better than flat oats. Clever advertising by large concerns sell undesirable foods with little value and perhaps much harm since these undesirable and "poor" nutrition foods may very well displace the "proper" nutrition foods on the pantry shelf and in the intestinal tract.

Obesity as a Medical Entity

The physicians of today have grave responsibilities in the field of nutrition as applied to their obese patients. We must look beyond the pale of fat we see on the patient. We must observe, understand, and recognize the psychological reactions which cause people to stuff themselves with fattening foods which produce obesity and the subsequent degenerative diseases. Diets and food should not be prescribed in a mechanical way, with the exclusive consideration for the somatic symptoms. We must not berate our obese patients as weak-willed morons and accuse them of cheating on their diets. If you do this to your patients you then turn the entire issue of dietary changes for the treatment of obesity into a moral rather than a physical one. Grave consideration of the psychological factors involved is important for the success of the medical management, and for the emotional well-being of the patient.

In the obese hypertensive elderly patient

the usual prescription for the exceedingly monotonous low salt and low caloric diet seems almost obligatory, or so we think. True we do get a reduction in blood pressure and weight but usually at the price of acute depression and apathy in the patient.

In the younger females, obesity may be, and in many instances is, a social handicap. We physicians see these patients, and try to lose weight for them with never once delving into the main reason for their sudden interest in "their fat." Many of these patients after a comfortable weight loss, will lapse into their former eating habits. The reason is simple. Perhaps they did not get their boy friend to "pop the question" even in their sylph-like condition. Perhaps their husband forgot to buy that mink stole, or that expensive dress. We physicians must know the basic reason for their sudden interest in their obesity. At times when these expected rewards are not forthcoming their efforts are short-lived and are followed by weight gain due to relapse in their diet. The patient must understand that he or she is losing weight for his own welfare and general health, not for worldly gains or ten giant steps to the altar.

In the complete understanding of the dynamics of normal weight and obesity two important factors must be understood, (1) food intake, (2) energy output. In the psychoanalytic study of obese individuals, psychiatrists are more and more impressed that there is a psychodynamics of the excessive muscular inactivity as well as the excessive food intake. In many adolescent and young adult patients with a 20 to 40 pound obesity factor, physical inactivity is quite conspicuous. Lack of physical activity is likewise present in all adult cases though less prominent.

The Importance of Eating a Good Breakfast

Nutritionists and others interested in the field of nutrition are in accord that a good breakfast is probably the most important meal of the day. A deficit in the daily nutrient intake is very apt to occur when a poor start is made at the breakfast meal. In my own practice I have found that only one out of four children had an

adequate nutrient intake at this very important meal time. In a study done on 500 Iowa school children it was found that only one out of five children had the daily required nutrient intake when the morning meal was below par. Similar findings have been reported for children in Maine, Indiana, Oregon and other states. What is the reason for this? Perhaps it is the pattern set at the breakfast meal with the missing nutrients and that this pattern is followed throughout the day with a like omission of these important foods.

It is highly important that we physicians concern ourselves with those patients who are "healthy" but in a state of poor nutrition.

At the University of Iowa, a research group under the guidance of the late Kate Dunn found that in healthy persons — children, young men and women, and men above 60 years of age with "no breakfast" there resulted reduced maximum work output, delayed reaction time, and increased tremor.

As children grow older, breakfast habits seem to become even more unsatisfactory. Girls seem to miss breakfast more often than boys, and the omission of the morning meal is more common on the week-ends. The usually poor nutrient breakfast meal is comprised of cereal with milk and sugar, toast with jelly, or milk with buttered toast.

A poor breakfast as outlined above was consumed by 48 per cent of the 6, 7, and 8 year old boys, and 56 per cent of the girls. Adolescent girls, in a study by Stare in New York State schools, were found to have the poorest selection of breakfast items — 71 per cent in this group were considered to eat poor breakfasts.

There is very little improvement in the dietary habits in college age students over the rest of the population. In certain studies it was found that from 9 to 25 per cent miss breakfast at least twice a week.

In the aged there is no improvement in the food habits. These patients may be limited in their diet by income, chronic illness, lack of home life, and just plain lack of appreciation of the value of a good nutritious breakfast.

The omission by our patients of this

very important "starter" meal — breakfast — will usually show a deficit in their daily nutrient intake. While those of our patients who begin the day with an excellent nutritious breakfast will follow with their other meals in like manner.

Importance of Proper Nutrition in Industrial Workers

Have we, as physicians, ever considered the importance of proper nutrition in our industrial workers? Have we ever considered the importance of adequate nutrients, particularly breakfast, for these workers? Inadequate diets, either by choice or lack of knowledge in these workers costs many hours in lost time and results in less efficiency, and in increased accident proneness. The poorly nourished worker, and there are many such, although they appear to be healthy, may show more fatigue, and more time loss due to more frequent illness than the well nourished worker. The lack of a proper breakfast, and the in-between snacks of sweet foods and beverages including coffee in the famous "coffee-break" were found to be the chief causes of nutritional deficiencies in industrial workers. There is a definite mid-morning "slump" as a result of an inadequate or no breakfast, and this slump is not helped to any extent by the "coffee-break". It has been found in my own studies on office and industrial workers that many of these workers omit breakfast but depend on the "coffee-break" to bolster them up in mid-morning. Usually this mid-morning snack is followed by an inadequate lunch, and a poor nutrient dinner. Thus results the patient with poor nutrition, a poor surgical risk in many instances, and a frequent visitor to our offices with infectious diseases.

Two important groups in our society of industrial workers, those working the "swing" shift, and those working the "graveyard" shift must be carefully watched and educated in proper and adequate nutrition. These have been described by Goodhart⁴ as poor in nutrition.

In industry where toxic substances are encountered, those workers with food intake deficient in certain nutrients such as protein and lipotropic factors show an increased susceptibility to the toxic substances

they encounter.⁵

The degree of physical work involved by each industrial worker will determine the caloric needs of each. Calories will of necessity be high for those engaged in heavy work, and since thiamine needs are proportional to the caloric intake this also should be increased.

At times the patient we see may not be ill at all, but his weakness, irritability, and decreased ability to concentrate may very well be due to the long intervals between meals and a lower blood sugar level. The answer may not be, and usually is not, a larger meal, but more frequent meals. The larger meal may tend to make the worker drowsy and a lack of interest in physical and mental effort may result. Nutritious between-meal snacks, or more frequent meals are valuable to many of our workers. Remember, I *did not say* a coffee or cigarette break . . . I said a *nutritious food break!*

Many industries have started programs for educating their employees in nutrition fully realizing that a well nourished employee is a better working employee with a very minimum of absenteeism.

Another group of great importance includes adolescents or young adults who do not live in their own homes, or with their parents, and who do their own cooking (be that as it may) or eat out. These patients are found to be in a poor nutritional state when compared to to-day's standards.

The nutrition of the executive — and I believe we physicians at times may be considered some sort of an executive — should receive more than casual attention. We executives are under considerable pressure and must be at top efficiency and therefore in a state of optimal health and well-being. This means proper nutrition. We physicians must not confuse obesity with good optimum nutrition. Proper nutrition will not produce obesity with its concomitant heart disease, hypertension, and other serious physical conditions.

Regular examinations for all of us, including the ever forgotten "Diet History" is just as important as the family history and the history of childhood diseases. What is important for us is certainly worthwhile for the health of our patients. Let us

remove the diet-care of our patients from the hands of the beauty editors of various magazines and newspapers. Let us likewise control the helm of proper direction in the field of nutrition rather than have this in the hands of television announcers and radio gabblers.

Nutrition is the very heart of life and living. Without proper food there would be no sex, no love, no romance and of course no propagation of healthy children.

We physicians must realize that it is important to educate our patients in the art of proper nutrition, and that this part of patient-medical-education is our duly licensed privilege and, I might add, responsibility. The time to begin is now.

I have not attempted to discuss the field of nutrition as related to, and its importance in, the ill patient. This would require many pages and much time. If I have given you some proper nutrient for thought in this writing, and if you begin in the near future with yourselves and your families this will soon reflect in your patients and practice. We may then look forward in the next decade to a more healthy and more properly nourished people.

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President Begins Appointment of Committees for 1957-58

The following committees are those which have been appointed to date by John Flack Burton, M.D., President of the Association.

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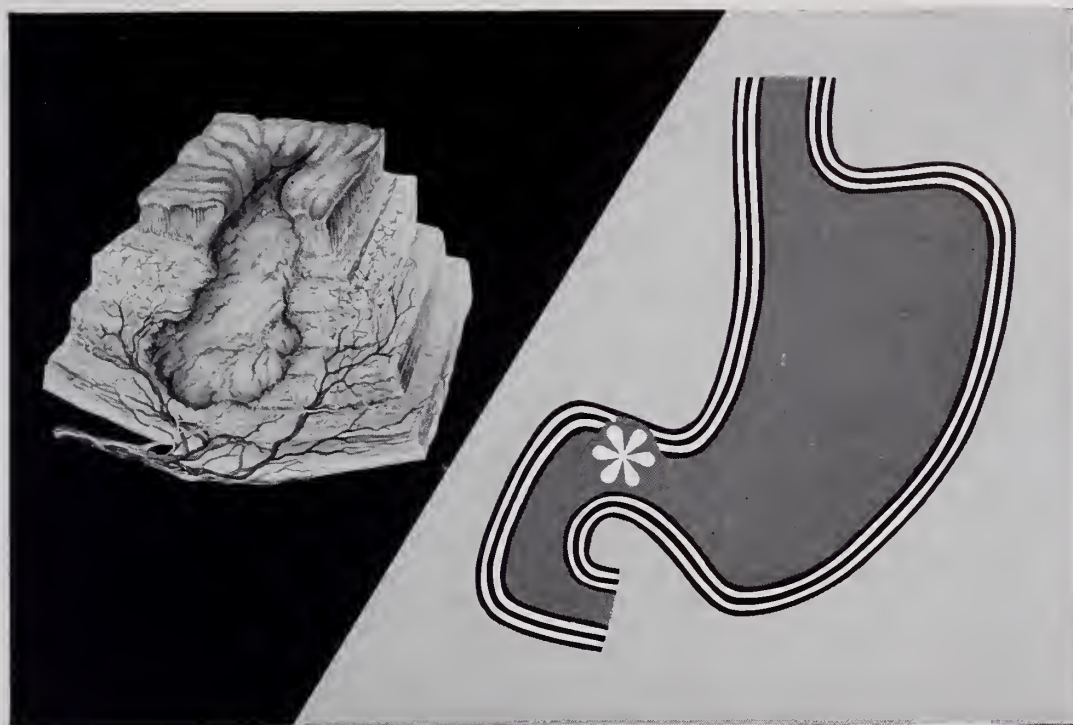
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M.D., Guthrie; E. A. McGrew, M.D., Beaver; Cooper D. Ray, M.D., Altus; Virginia Curtin, M.D., Watonga; Clinton Gallaher, M.D., Shawnee; Rex Graham, M.D., Miami, and A. T. Baker, M.D., Durant.

CANCER COMMITTEE—Bruce R. Hinson, M.D., Enid, Chairman; Henry Browne, M.D., Tulsa; Paul Lingenfelter, M.D., Clinton, and Hubert Anderson, M.D., Oklahoma City.

MEDICARE COMMITTEE—Walter E. Brown, M.D., Tulsa; Gerald Rogers, M.D., Oklahoma City; L. B. Word, M.D., Bartlesville; Horton Hughes, M.D., Shawnee; C. E. Green, M.D., Lawton; D. C. Ramsay, M.D., Ada; R. C. Lawson, M.D., Oklahoma City, and Tom S. Gafford, Muskogee.

INSURANCE COMMITTEE—Basil A. Hayes, M.D., Oklahoma City, Chairman; Port Johnson, M.D., Muskogee; Frank H. Austin, M.D., Lawton; Curtis B. Cunningham, M.D., Clinton; Edwin C. Yeary, M.D., Ponca City, and Ralph A. Smith, M.D., Oklahoma City.



Pro-Banthine® Relieves Pain, Accelerates Peptic Ulcer Healing

The efficiency of Pro-Banthine (brand of propantheline bromide) in inhibiting the chemical substance which mediates parasympathetic gastric activity explains the success of the drug in ulcer therapy. Pro-Banthine blocks acetylcholine at both the ganglia and parasympathetic effector sites. This dual action controls excess neural stimulation of both gastric secretion and motility.

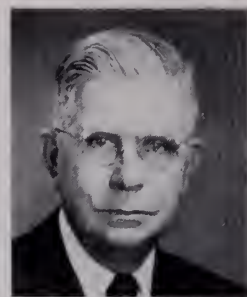
The therapeutic benefits of this anti-

cholinergic blockade consist, as many clinical investigators have noted, in prompt relief of ulcer pain and pronounced acceleration of ulcer healing.

The suggested initial dosage is one 15-mg. tablet with meals and two tablets at bedtime. Two or more tablets four times a day may be indicated in severe manifestations. G. D. Searle & Co., Chicago 80, Illinois. Research in the Service of Medicine.

SEARLE

PRESIDENT'S LETTER



Our great State of Oklahoma is celebrating its semi-centennial birthday and we as citizens are justly proud of our State's many achievements.

We as members of the medical profession are especially proud of the accomplishments of the medical profession in Oklahoma. From the hardy pioneer doctor who rode horseback and carried his supplies in his saddlebag to our doctor of today practicing in the most modern hospitals and equipped with the latest equipment; from the meager shelf in the back of the doctor's office to the atomic research laboratories of today; from the occasional visiting lecturer to full time professors, our profession has kept abreast with knowledge. We have built clinics; we have staffed our medical school and we have created a Public Health Department all ranking amongst the best of the nation.

We are especially proud of our Medical Research Foundation—truly an Oklahoma Institution, conceived by farsighted doctors, built by perseverance and charity of both the medical profession and grateful public. It stands as a mighty rock amongst government built and government supported institutions, as a sign of private enterprise and private direction.

Recently I had the pleasure of attending the annual meeting of the directors of this institution and our attention was called to the completion of a beautiful Chapel built within the building of the Foundation. At first thought the idea of a Chapel in this most scientific building and amongst the activities of various sciences seemed a little incongruous. As I sat in the Chapel and admired its beauty and listened to the soft music I realized that it was most appropriate.

As I further meditated I thought how applicable was the idea for the medical profession throughout the State. Naturally we could not all build Chapels, but we could create a Chapel within ourselves—that is in our daily work we could practice Humbleness. Thinking about each person we attend not as “just another case,” but as a creature of God just like ourselves.

John Black Burton, M.D.

Association Activities



THE EXTERIOR OF THE 'CAVALCADE OF HEALTH' building was designated by a large neon-lighted sign. The building leased by the Association to house the exhibits contained over 20,000 square feet of floor space.

OVER A QUARTER MILLION PERSONS VISIT CAVALCADE OF HEALTH

Over a quarter million persons visited the "Cavalcade of Health" show during the 24-day run of Oklahoma's Semi-Centennial Exposition at the Fairgrounds in Oklahoma City. The estimate was arrived at from figures recorded by the American Medical Association's hearing test exhibit. The total attendance for the Exposition which opened on June 14 and closed on July 7 was 1,461,256.

The health education show, which was the brain child of the Oklahoma State Medical Association, was approved by the Council in January. Selected to act as chairman of the committee to organize what was probably the State Association's greatest single public service endeavor was Henry H. Turner, M.D., of Oklahoma City.

Assisting Doctor Turner were: Vernon Cushing, M.D., Vice-Chairman of the General Committee; Meredith Appleton, M.D., Chairman of the Executive Committee; John Cunningham, M.D., Chairman of the Exhibits Committee; S. Fulton Tompkins, M.D., Chairman of the Motion Picture Review

Committee and William J. Dowling, M.D., Chairman of the Publicity Committee.

Many Interesting Exhibits

The "Cavalcade of Health" consisted of non-commercial exhibits prepared by voluntary health agencies, related medical organizations, official state agencies, pharmaceutical manufacturers, insurance associations, and other lay groups who are interested in promoting better health for Oklahoma.

One of the biggest attractions of the show was "Juno," the plastic lady loaned to the Association by its owner the Dominican Republic. The transparent figure which was built in Germany at the cost of \$50,000 clearly indicated the principal internal organs as a simulated voice explained the function of each.

Other interesting displays were the atomic reactor, "Indian Medicine," and the American Medical Association's "Life Begins," "Medical Quackery," and "We See,"

JUNO, THE PLASTIC LADY, was one of the biggest attractions of the show. Principle internal organs of the transparent figure illuminated in synchronization as the simulated voice of the figure explained the function of each. The \$50,000 exhibit was loaned to the Association by its owner the Dominican Republic.

"We Hear," and "Food, Facts, and Falacies."

Fifty years of medical progress were reflected in such comparative displays as physicians' offices of 1907 and 1957 and model laboratories pointing up today's complex practice of medicine as compared with early days.

Other exhibitors were:

Oklahoma Hospital Association, Oklahoma State Nurses Association, E. R. Squibb & Sons, Cerebral Palsy Institute, Oklahoma Medical Research Foundation, University of Oklahoma School of Medicine and Veterans Administration Hospital, University of Oklahoma Medical Center, American Foundation for Allergic Diseases, Oklahoma State Dental Association, American Medical Association, Smith, Kline and

Fre. ch Laboratories, Oklahoma Dietetic Association, Oklahoma City Dairy Council, American Dairy Association, National Dairy Council, Committee on Diabetes, Insurance Industry, Oklahoma State Heart Association, Oklahoma Chapter of the American Cancer Society, Samuel Roberts Noble Foundation, Inc., Oklahoma State Veterinarians Association, Rehabilitation Agencies, National Society for Prevention of Blind-

Agencies, National Society for Prevention of Blindness, Delta Gamma Sorority, Oklahoma Association of Pathologists, Oklahoma Society of Internal Medicine, Oklahoma County Pharmaceutical Association, Oklahoma State Department of Health, Oklahoma Alcoholism Association, Oklahoma Chapter of Arthritis and Rheumatism Foundation, Oklahoma Dispensing Opticians Association, Oklahoma Tuberculosis Association, National Foundation for Infantile Paralysis, Oklahoma State Department of Mental Health, Oklahoma Association for Mental Health, Ciba Pharmaceutical Products, Inc., Blue Cross-Blue Shield Plans.

In addition to these exhibitors, the Oklahoma County Medical Society made a substantial financial contribution toward the promotion of the show.

A DRAMATIC DISPLAY was the American Medical Association's "Life Begins" series. The panels were explained by a tape recording.





"ROBBIE, THE ROBOT" answered questions concerning heart diseases for viewers. "Robbie" was a part of the Oklahoma State Heart Association's exhibit.



FIRST TIME SHOWN—The Atomic Reactor pictured above was on display at the Cavalcade of Health. This was the first time the reactor had been shown to the public anywhere in the United States in 1957. Built by the Aerojet-General Nucleonics Company, San Ramon, California, the reactor was supplied the Oklahoma State University by the Atomic Energy Commission where it will be used for educational purposes.



FIFTY YEARS OF MEDICAL PROGRESS were reflected in this comparative display of physicians' offices of 1907 and 1957.

PLASTIC MOULAGES gave viewers a realistic picture of how cancerous portions of the body look. The display was loaned to the Oklahoma Division of the American Cancer Society by Scott and White Clinic, Temple, Texas. Visitors to the booth were also given pamphlets telling them about the "Seven Signs of Cancer."



THE OKLAHOMA STATE NURSES ASSOCIATION selected "Nursing as a Career" for the theme of their exhibit which covered the education of the nurse for the duties and responsibilities she performs. Joining them in sponsoring the booth was the Oklahoma League for Nursing, the Oklahoma Board of Nurse Registration and Nursing Education and the Oklahoma State Association of Licensed Practical Nurses.

A.M.A.'s 106th Meeting Biggest Ever Held

The American Medical Association's 106th Annual Meeting in New York City was the biggest and probably the best ever held.

The attendance set a new all-time record. Total registration for the five-day session was 55,847, including 19,469 physicians. At the A.M.A. Centennial Meeting in Atlantic City in 1947, the total number of physicians was 15,667.

Oklahoma Participants

John Flack Burton, M.D., President of the Oklahoma State Medical Association, arrived in New York a few days early to attend a meeting of the Council on Medical Service of the American Medical Association of which he is a member.

Wilkie D. Hoover, M.D., Tulsa, was a Delegate to the Convention and also served on the Reference Committee on Miscellaneous Business. Also representing the Oklahoma State Medical Association were Malcolm E. Phelps, M.D., Delegate from El Reno, and Alternate Delegates R. Q. Goodwin, M.D., Oklahoma City, and E. H. Shuller, M.D., McAlester. Representing the Dermatology Specialty group as a delegate was W. A. Showman, M.D., of Tulsa.

Henry H. Turner, M.D., Oklahoma City, participated in the general scientific meeting. Doctor Turner spoke on the subject "Recent Advances in Endocrinology."

House of Delegates

The House of Delegates had a busy session and, despite the great volume of business, everything went smoothly.

Revision of the Principles of Medical Ethics, relations with the United Mine Workers of America Welfare and Retirement Fund, the federal government's Medicare program, new standards for medical schools, a new statement on occupational health programs and the issue of Social Security benefits for physicians were among the wide variety of subjects acted upon by the House.

The House voted the 1957 Distinguished Service Award of the American Medical Association to Doctor Tom Douglas Spies, head of the department of nutrition and metab-

olism at Northwestern University Medical School, Chicago, and director of the nutrition clinic at Hillman Hospital, Birmingham, Alabama, for his outstanding contributions to the science of human nutrition.

For the third time in A.M.A. history, the House also voted a special citation to a layman for outstanding service in advancing the ideals of medicine and contribution to the public welfare. Recipient of this award was Henry Viscardi Jr. of West Hempstead, New York, founder and president of Abilities, Inc., which employs only severely disabled persons.

Election of Officers

Gunnar Gundersen, M.D., of La Crosse, Wisconsin, member of the A.M.A. Board of Trustees since 1948 and chairman for the past two years, was unanimously chosen president-elect for the year ahead. Doctor Gundersen, who also was first chairman of the Joint Commission on Accreditation of Hospitals from 1951 to 1953, will become president of the American Medical Association at the June 1958 meeting in San Francisco. There he will succeed Doctor David B. Allman of Atlantic City, New Jersey, who became the 111th president at inaugural ceremonies in the Grand Ballroom of the Waldorf-Astoria Hotel during this year's meeting.

In addition to Doctor Gundersen, the new president-elect, the following officers were selected by the House on Thursday:


Doctor Jesse Hamer of Phoenix, Ariz., vice-president; Doctor George F. Lull of Chicago, secretary; Doctor J. J. Moore of Chicago, treasurer; Doctor E. Vincent Askey of Los Angeles, speaker, and Doctor Louis Orr of Orlando, Fla., vice-speaker.

Four new members were elected to the Board of Trustees: Doctor George Fister of Ogden, Utah, to succeed Doctor James R. Reuling; Doctor Cleon Nafe of Indianapolis, Ind., to succeed Doctor James McVay; Doctor James Z. Appel of Lancaster, Pa., to replace the late Doctor Thomas P. Murdock, and Doctor Raymond McKeown of Coos Bay, Ore., to replace Doctor Gundersen. Doctor Edwin S. Hamilton of Kan-



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effectiveness for 24 hours
on a single (1 Gm.) dose



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KYNEX Sulfamethoxypyridazine is a completely new, long-acting single sulfonamide with clinical advantages hitherto unequalled in sulfa therapy—

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BROAD-RANGE EFFECTIVENESS—particularly efficient in urinary tract infections due to sulfonamide-sensitive organisms, including *E. coli*, *Aerobacter aerogenes*, *paracolon bacilli*, *Streptococci*, *staphylococci*, Gram-negative rods, diphtheroids and Gram-positive cocci.

GREATER SAFETY—high solubility, slow excretion and low dosage help avoid crystalluria. No increase in dosage is recommended.

Reg. U.S. Pat. Off.

Recommended; the usual precautions regarding sulfonamides should be observed.

CONVENIENCE—the low maintenance dosage of 1 Gm. (2 tablets) per day for the average adult offers optimum convenience and acceptance to patients.

Each quarter-scored tablet contains: sulfamethoxypyridazine ... 0.5 Gm. (7½ grains).

1. Boger, W. P.; Strickland, C. S. and Gylfe, J. M.: *Antibiot. Med. & Clin. Ther.* 3:378 (Nov.) 1956.

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KYNEX[®] SYRUP

SULFAMETHOXYPYRIDAZINE LEDERLE

- Aqueous—readily miscible
- Caramel flavored
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- Readily acceptable by patients of all ages

Each teaspoonful (5 cc.) of KYNEX Syrup contains 250 mg. sulfamethoxypyridazine.

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kakee, Ill., was elected chairman of the Board at its organizational meeting after the elections in the House.

Doctor Homer L. Pearson Jr. of Coral Gables, Fla., was renamed to the Judicial Council. Two new members were elected to the Council on Medical Education and Hospitals: Doctor Clark Wescoe of Lawrence, Kansas, to succeed Doctor Weiskotten, and Doctor Warde B. Allan of Baltimore, Md., to succeed Doctor F. D. Murphy of Lawrence, Kansas.

For the Council on Medical Service, Doctor Robert L. Novy of Detroit, Mich., was re-elected, and Doctor Hoyt Woolley of Idaho Falls, Idaho, was chosen to replace Doctor McKeown. Doctor Warren W. Furey of Chicago was re-elected to the Council on Constitution and By-Laws.

New Principles of Medical Ethics

The House approved the long-discussed revision of the Principles of Medical Ethics, originally submitted at the 1956 annual meeting in Chicago. The final version, presented by the Council on Constitution and By-Laws and then amended by reference committee and House discussions in New York, is published in insert form suitable for framing in this issue of the *Journal*.

Guides for Relations With UMWA Fund

In a key action on the basic issue of third-party intervention, as it affects the patient's free choice of physician and the physician's method of remuneration, the House adopted the "Suggested Guides to Relationships Between State and County Medical Societies and the United Mine Workers of America Welfare and Retirement Fund," which were submitted by the A.M.A. Committee on Medical Care for Industrial Workers. In approving the guides, the House also recommended that the Board of Trustees study the feasibility and possibility of setting up similar guides for relations with other third-party groups such as management and labor union plans.

The Medicare Program

The House considered three resolutions dealing with the federal government's Medicare program for the dependents of servicemen. The delegates adopted one resolution

condemning any payments under the Medicare program "to or on behalf of any resident, fellow, intern or other house officer in similar status who is participating in a training program." Government sanction of such payments, the House declared, would give impetus to the improper corporate practice of medicine by hospitals or other non-medical bodies. Such proposals, the House added, would violate traditional patterns of American medical practices, seriously aggravate problems of hospital-physician relationships, encourage charges by hospitals for residents' services to patients not under the Medicare program, and create a variety of additional problems in such areas as medical licensure and health insurance.

In another action on Medicare, the House recommended that the decision on type of contract and whether or not a fee schedule is included in future contract negotiations should be left to individual state determination. In this connection, however, the House restated the A.M.A. contention that the Dependent Medical Care Act as enacted by Congress does not require fixed fee schedules; the establishment of such schedules would be more expensive than permitting physicians to charge their normal fees, and fixed fee schedules would ultimately disrupt the economics of medical practice.

The House also suggested that the A.M.A. attempt to have existing Medicare regulations amended to incorporate the Association's policy that the practice of anesthesiology, pathology, radiology and physical medicine constitute the practice of medicine, and that fees for services by physicians in these specialties should be paid to the physician rendering the services.

New Statement on Medical Schools

To replace the "Essentials of an Acceptable Medical School," initially approved by the House of Delegates in 1910 and most recently revised in 1951, the House adopted a new statement entitled "Functions and Structure of a Modern Medical School." Presentation of the document followed a year of careful study by the Council on Medical Education and Hospitals in collaboration with the Association of American Medical Colleges.

The statement is intended to provide

flexible guides which will "assist in attaining medical education of ever higher standards" and "serve as general but not specific criteria in the medical school accreditation program." The document encourages soundly conceived experimentation in medical education, and it discourages excessive concern with standardization.

"No rigid curriculum can be prescribed for accomplishing the objectives of medical education," it states. "On the contrary, it is the responsibility of the faculty of each school continually to re-evaluate its curriculum and to provide in accordance with its own particular setting and in recognition of advances in science a sound and well-integrated educational program."

Adopt New Principles for Industrial Medicine

One of the most important actions taken by the A.M.A. House of Delegates was the adoption of a new statement on occupational health programs. This statement was simply entitled: "Scope, Objectives and Functions of Occupational Health Programs."

The statement was first approved by the A.M.A. Council on Industrial Health at its annual meeting in Los Angeles last February. Then it was approved by the Board of Trustees. Early in June this year, it was adopted by the House of Delegates after being given careful consideration by the reference committee on hygiene, public health and industrial health.

Why is this an important document?

"Because," as Council Secretary B. Dixon Holland said, "it will serve as a 'bible' to all physicians engaged in any way in industrial health work." It gives a clear-cut expression to medicine's acknowledgment that the American working man is entitled to the best health protection possible while he is on the job.

Good occupational health programs do not

benefit the man on the job alone, but, as Doctor Holland says, they are good for business and the nation's economy.

In the past there has been no authoritative delineation of all that is encompassed in industrial medicine.

"An industrial physician has often been pictured as a glorified first-aid man to a captive clientele," Doctor Holland said, adding: "Labor often pictures him as the 'company doctor,' a hireling of management. And management has sometimes expected him to serve as a sort of a cat's paw to protect the company against claims."

The purpose of the new pronouncement is to define, improve and dignify the practice of occupational medicine in all phases, thereby helping all workers.

"In brief," Doctor Holland said, "the new statement will help the ethical, competent industrial physician clear up any doubts in the minds of his fellow-physicians in private practice as to whether he is practicing good occupational medicine, and thereby gain their good will and cooperation."

Social Security for Doctors

Two resolutions favoring compulsory inclusion of physicians in the federal Social Security system and another one calling for a nationwide referendum of A.M.A. members on the issue were rejected by the House. The delegates reaffirmed their opposition to compulsory coverage of physicians under the Old Age and Survivors Insurance provisions of the Social Security Act. They also recommended a strongly stepped-up informational program of education which will reach every member of the Association, explaining the reasons underlying the position of the House of Delegates on this issue. The House at the same time reaffirmed its support of the Jenkins-Keogh Bill.

26th Legislature Passes 14 Bills Related to Health Field

During the 26th Legislature, 1020 bills were introduced; 472 were introduced in the Senate and 548 in the House of Representatives. Of these bills, 488 were passed for a percentage of 47.84. Of the 488 passed and signed by the Governor fourteen were in one way or another related to the health field. This number does not include appropriation bills.

Appropriations

With regard to appropriations, the Board of Regents for Higher Education requested for the Medical School's teaching hospital \$5,079,048. The Legislature appropriated \$4,545,716 for the biennium.

The Board asked for \$1,994,720 for the University of Oklahoma's School of Medicine and received \$1,571,990 for the biennium.

The Department of Mental Health requested \$27,050,000 for the biennium and got \$17,974,108. This amount is an increase of thirty-three cents per patient over the previous biennium at which time the average money available per person was \$2.13. With other funds that are available, the amount that will be available per person for the next biennium is \$2.75.

The State Health Department, for the biennium, requested \$1,250,000; they were appropriated \$737,525. The Health Department also receives approximately \$500,000 from Federal funds which is a decrease in Federal moneys since 1950 of approximately \$500,000.

Senate Bills

SB 2 providing for special education of exceptional children, the word "exceptional" meaning those children needing special attention.

SB 184 creates a new code for the adoption of children and is a companion measure with *SB 185* which establishes and defines the offense of trafficking in children.

SB 312 provides for voluntary admission and court certification of patients to private hospitals or institutions making the attending physician responsible for treatment and discharge. This bill was a request from the hospitals and psychiatrists for the use of private hospitals and institutions in the treatment of mental disorders.

House Bills

HB 520, 521, 522, 523, 525 all pertain to either narcotic, barbiturate, and amphetamine violations, but do not restrict their use in any way by physicians.

HB 686 makes moneys available for the educations and general operational costs of any state student enrolled in the Oklahoma College for Women's Speech and Hearing Clinic.

HB 707 increases the annual registration fees of doctors of medicine from three dollars to five dollars.

HB 772 changes the name of the Crippled Children's Hospital to Oklahoma Children's Memorial Hospital.

HB 784 adds disease traceable to working with fissionable materials to Workman's Compensation coverage.

HB 825 provides a method for persons to donate their bodies or parts thereof. With the passage of this act, the Lions Clubs of the state are planning on financing the creation of an eye bank at the University Hospital.

HB 919 regulates the prescribing and selling of paregoric. It is now necessary that purchasing of paregoric be on a physician's prescription.

The two measures introduced in the Legislature concerning the lowering of standards for the licensure of pharmacists failed of passage. The chiropractic profession introduced four bills that would broaden the scope of practice, all of which failed to pass. Three bills introduced in the general field of visual sight failed of passage.

There were also numerous bills related to medicine and Workman's Compensation which also did not pass. Representative Guy Bailey of Ponca City, Chairman of the Public Health Committee, and Representative Dave Wilson, Fairland, Chairman of Committee on Professional and Occupational Regulations of the House, are due commendation for the excellent cooperation with the Association during the Legislature as is Senator Howard Young of Stigler who is the Chairman of the Public Health Committee in the Senate.

Naturally, with the return of Senator Louis H. Ritzhaupt to the Senate, the legislation in the health field was in excellent hands.

Oklahoma Citian to Help Organize Auxiliary to S.A.M.A.

Mrs. Robert Simon, Oklahoma City, was elected chairman of the Steering Committee of the Student American Medical Association at their annual meeting in May 1957. The Committee consisting of four ladies elected from each section of the United States and two members appointed from the S.A.M.A. will encourage and supervise the organization of an Auxiliary in all medical schools that have S.A.M.A. Chapters and will endeavor to set up the actual organization procedures for the next annual convention in 1958.

History Shows Need for Auxiliary

For over ten years, wives of the physicians all over the United States have been asked to speak to groups of Medical Students' wives on one subject: "What is a good doctor's wife and how can we become one."

These young women seem to be well aware of the problems they will meet in the next twenty years and they are most anxious to be prepared to meet that challenge.

S.A.M.A. Organized

The American Medical Association had already recognized the need of preparing the future doctors for their role as practicing physicians in their chosen communities and for their acceptance of responsibility as members of the various medical organizations and had encouraged and assisted the organization of the Student American Medical Association, now called the S.A.M.A., whose aims and purposes are, "to familiarize its members to meet the social, moral, and ethical obligations of the medical profession."

Another consideration was the opinion expressed by several deans of students that the students and their wives need very much to get better acquainted with the local practicing physician so that the young people could get a better understanding of what the practice of medicine entails on a family basis. It would also enable the practicing physician to appreciate the problems of the students in relation to their home life.

As a result of all this thinking, the idea was conceived to utilize these four years as



MRS. ROBERT SIMON

a training period for the wives also, in order to provide a solution to what seemed to them a very urgent need. The logical answer was an auxiliary to the already established S.A.M.A. whose aims and purposes were so very similar.

In September 1955 such an auxiliary was organized at the University of Oklahoma Medical School after permission had been granted by all the proper authorities. The Woman's Auxiliary to the Oklahoma County Medical Society was the sponsoring organization.

Soon after the group had been organized in 1955 the Oklahoma Auxiliary presented the idea of a National Auxiliary to the National S.A.M.A. for its consideration. Mrs. Robert Simon, president of the Oklahoma Auxiliary, was invited to the national annual meeting of the S.A.M.A. in Philadelphia in May 1957 to present the idea to the Convention and to the wives of the delegates in person. With the financial assistance of several interested and generous physicians in Oklahoma City, Mrs. Simon was able to attend the Convention and present her project.

The House of Delegates voted to approve the organization of such an Auxiliary to the S.A.M.A.

The following Sunday morning at a brunch given to the young women by the Woman's Auxiliary to the American Med-

(Continued on Page 357)

Doctor Speed Honored For 50 Years' Service in Sayre

Friends and relatives from over Oklahoma and some from out of the state gathered in Sayre on June 3 to pay tribute to H. K. Speed, M.D., former president of the Oklahoma State Medical Association in 1938-39, when he was honored for his fifty years of service as a practicing physician in Sayre. The day had been officially designated "Doctor Speed Day."

The day's activities included a noon luncheon meeting given by the Rotary Club with the Rotary clubs at Erick and Elk City joining for the occasion, selecting a Speed Day King and Queen, judging a baby contest, and finding the youngest and oldest Speed babies and the family with the largest number of Speed babies. A parade in downtown Sayre was held in the afternoon and concluding the event was a reception under the sponsorship of the Kiwanis and Business and Professional Woman's Clubs.

At the Rotary luncheon, Doctor Speed received many tributes and was presented with a plaque in appreciation of his untiring efforts by the Eric Rotary Club and one



H. K. SPEED, M.D., left, is presented hundreds of congratulatory letters by Mayor Cecil I. Neely of Sayre at the "Doctor Speed Day" luncheon.



FIFTY YEAR PIN—Ross Deputy, M.D., right, of Clinton makes a presentation of a 50 year pin to Doctor Speed during a brief ceremony at the "Doctor Speed Day" luncheon.

from the Sayre Chamber of Commerce. The school board presented life-time tickets covering all school activities to Doctor and Mrs. Speed and the mayor presented a bundle of letters of appreciation from hundreds of close friends including tributes from Senator Mike Monroney, Senator Robert S. Kerr, and Governor Raymond Gary.

Resolutions adopted by the State Senate and House of Representatives commending Doctor Speed for his 50 years of active service were read. Ross Deputy, M.D., Clinton, Counselor to the Oklahoma State Medical Association presented Doctor Speed with a 50 year pin.

Gubernatorial Candidates Announce

Following the adjournment of the Legislature, numerous gubernatorial candidates made known their desire to serve the State in the capacity of governor.

Among those announcing for governor was Speaker of the House Mr. B. E. "Bill" Harkey who for over twelve years had been attorney for the Oklahoma State Board of Medical Examiners.

Third Southeastern Oklahoma Symposium Set for August

The McAlester Clinic Foundation will present its Third Annual Southeastern Oklahoma Clinical Symposium on August 10 and 11 at McAlester, Oklahoma. The Symposium is approved by the American Academy of General Practice in Category 1 for ten hours.

The program for the two-day meeting will consist of scientific papers, clinical presentations, panel discussions and technical exhibits.

Guest speakers will be: David C. Humphrey, M.D., Internist, Cleveland, Ohio; John F. Burton, M.D., Plastic Surgeon, Oklahoma City; Adolph N. Vammen, M.D., OB-Gyn, Tulsa; John A. Schilling, M.D., Surgeon, Oklahoma City; Judge Andrew J. Wilcoxon, District Judge, Muskogee; Edmond H. Kalmon, M.D., Radiologist, Oklahoma City; Tom S. Gafford, M.D., Pathologist, Muskogee; Louis J. West, M.D., Psychiatrist, Oklahoma City; and J. Raymond Stacy, M.D., Orthopedist, Oklahoma City.

A golf tournament and dinner-dance have been planned to provide entertainment for those attending the Symposium. A program for the ladies is also on the schedule.

There is no charge for the meeting except the \$2.50 each for the dinner on Saturday night.

Reservations may be made by writing to Mr. Charles A. Miller, Business Manager, McAlester Clinic, Third and Seminole, McAlester, Oklahoma.

Garfield-Kingfisher Members Immunize Flood Workers

Members of the Garfield-Kingfisher County Medical Society donated their time and equipment in giving free typhoid fever vaccinations to Enid residents and flood workers. The city of Enid raised funds to purchase the vaccine for the 324 vaccinations given.

Assisting the doctors by registering those receiving shots were members of the medical auxiliary.

The Society has volunteered their time and equipment to give the remaining two shots of the series later.



NOBLE S. BIRKETT

Detailmen Elect Oklahoma Citian National President

Noble S. Birkett, Oklahoma City Ortho Pharmaceutical Corporation representative, was elected the 9th national president of the Medical Service Society of America at the organization's recent convention in Memphis, Tennessee. Jim Avery with McNeil Laboratories of Oklahoma City was elected secretary-treasurer.

Medical Service Society of America, with offices in Oklahoma City, is recognized by the American Medical Association as the official national professional society of ethical medical representatives.

Annual projects of the Medical Service Society include presentation of a Plaque Key award to the General Practitioner of the Year as selected by the American Medical Association and operation of message center services at medical conventions.

Dr. O. E. Howell Honored By Community For Service

O. E. Howell, M.D., 80-year-old pioneer Oklahoma physician, was honored in a community celebration at Washington on June 16, 1957, in recognition of his service. Doctor Howell lives in Norman and commutes to his office in Washington.

Doctor Howell has practiced medicine 58 years in Oklahoma, with 29 years in the Washington community.

Medical Quackery Investigator Proves To Be Popular Speaker

Richard M. Stalvey, known as "Mr. F.B.I. of Medical Quackery," proved to be a very popular speaker with various organizations during his Oklahoma City visit for the Semi-Centennial Exposition, June 14-July 7. Stalvey, whose official title is Administrative Assistant to the Director of the Bureau of Investigation of the American Medical Association, scheduled speaking engagements in addition to spending much time at the A.M.A.'s medical quackery booth at the Cavalcade of Health.

Among organizations requesting to hear Stalvey's illustrated speech on medical quackery were: the Midwest City Kiwanis, Midwest City Rotary Club, the El Reno Lion's Club, Village Kiwanis Club, Advertising Club, Junior Chamber of Commerce of El Reno, Blue Cross-Blue Shield of Tulsa, the Oklahoma University School of Nursing, and the School of Nursing at Wesley Hospital in Oklahoma City.

The Bureau of Investigation of the A.M.A. acts as a clearing house for information on various phases of quackery or pseudo-medicine. Among the subjects with which it deals are "patent" medicines, cultists, food faddism, "new" or secret treatments, and illegal practitioners.

Stalvey came to the Bureau of Investigation following three years service with the U.S. Food and Drug Administration as a specialist in drug and device cases. He has been a member of the A.M.A. staff three years.

C. W. Joyce, M.D. Awarded 50-Year Pin

Charles W. Joyce, M.D., Fletcher's veteran physician, was awarded a 50-Year Pin at a recent meeting of the Comanche-Cotton Medical Society in the Hotel Lawtonian. Making the presentation to Doctor Joyce was Charles E. Green, M.D., president of the Comanche-Cotton County Medical Society.

Have You Heard?

H. W. FORD, M.D., who has practiced medicine 50 years, the last 40 of which have been in Tulsa, recently celebrated his 73rd birthday.

JAMES W. WHITE, M.D., Tulsa Pediatrician, was among 186 doctors elected to fellowships in the American Academy of Pediatrics recently.

R. C. PIGFORD, M.D., recently received an appreciation certificate for his work in the battle against heart disease from the Oklahoma State Heart Association. Doctor Pigford is the education-public relations chairman to the Tulsa County Heart Association.

CLARENCE E. BATES, M.D., has been named superintendent of the Veterans Home-Hospital in Sulphur.

T. H. MCCARLEY, M.D., of McAlester was honored recently by members of the Oklahoma Board of Health for his 12 years service as a member of the board. Doctor McCarley is being replaced by L. N. Dakill, M.D., also of McAlester.

GEORGE TALLANT, M.D., of Frederick was guest speaker for District 20 of Oklahoma Nurse Association when members met June 6 in the conference room of the Frederick hospital. Doctor Tallant's topic was "Radiological Warfare and Atomic Medicine."

W. T. MCCOLLUM, M.D., Oklahoma City heart specialist, was guest speaker at a meeting of the Britton Kiwanis Club on May 16. Doctor McCollum spoke on the care of the heart.

PAUL LINGENFELTER, M.D., Clinton, discussed phases of the battle against cancer as guest speaker of his local Kiwanis Club in May.

THURMAN SHULLER, M.D., McAlester, addressed the local Kiwanis club in May discussing the polio vaccination program with the group.

D. D. PIERSON, M.D., of Mangum was speaker at a meeting of the Greer County Heart Association on June 7.



OPENING RECENTLY was this new clinic in Altus located at the corner of Hudson and Cypress streets. The one-story structure contains 9,500 square feet of floor space and has 11,000 square feet of paved, off-the-street parking space. The building houses the offices of doctors J. H. Abernethy, Wayne Starkey, W. D. Holt, R. H. Fox, C. D. Ray, and C. L. Tefertiller. Sharing the building with the physicians are Alva Hill, D.D.S. and Morris Willis, pharmacist.

Heart Association Elects State Officers

The Oklahoma State Heart Association elected officers at its seventh annual meeting held June 15 in Oklahoma City. Officers elected to serve during the coming year were: Mr. Charles Follansbee, President, Tulsa; William Best Thompson, M.D., President-Elect, Oklahoma City; Mr. Gerdie Hurd, Vice-President, Sallisaw; Mr. Paul C. Bachmann, Secretary, Cleveland; and Mr. W. D. Finney, Treasurer, Ft. Cobb.

Physicians serving on the Board of Directors are: Ray B. Graybill, Ardmore; Harold M. McClure, Chickasha; H. Bill Howard, Lawton; F. Redding Hood, Oklahoma City; William S. Jacobs, Tulsa; J. B. Morey, Ada; C. J. Roberts, Enid; Kirk T. Mosley, Oklahoma City; Terrell Covington, Tulsa.

Dean Walker, Tulsa; William Best Thompson, Oklahoma City; E. C. Mohler, Ponca City; James C. Peters, Tulsa; Robert H. Bayley, Oklahoma City; C. S. Lewis, Jr., Tulsa; H. W. Wendelken, Miami, are also on the Board.

Physicians attending the scientific session of the day-long meeting heard Michael Ellis DeBakey, M.D., chairman of the Department of Surgery at Baylor University College of Medicine in Houston, Texas, speaking on "Changing Concepts in Aortic and Arterial Surgery."

Officers of State Associations Hold 13th Annual Meeting

The Conference of Presidents and Other Officers of State Medical Associations held its thirteenth annual meeting on Sunday, June 2, 1957, in New York City. Guthrie Y. Graves, M.D., President from Bowling Green Kentucky, presided over the meeting held in the Waldorf Astoria's Sert Ballroom.

C. E. Northcutt, M.D., Ponca City, served as president of the third Conference.

John W. Green, M.D., Vallejo, California, is President-Elect and James A. Waggener of Indianapolis, Indiana, is Secretary-Treasurer.

AUXILIARY TO S.A.M.A.

(Continued from Page 353)

ical Association, the first steps toward organization were taken.

Mrs. Paul C. Craig, President-Elect of the Woman's Auxiliary to the American Medical Association; Mrs. Alfred W. Crozier, President of the Pennsylvania Auxiliary; Mrs. George H. Garrison, appointed liaison from the National Auxiliary, were appointed to lend assistance.

Future Looks Promising

The future of the organization looks very promising indeed and it is hoped that the young women who take advantage of the program will find the life as a doctor's wife more rewarding and satisfying because they learned in advance something of the ideals and purposes of their husband's profession and were also prepared for the responsibilities which their position as a physician's wife in the community entails.

Deaths

OTIS GUY BACON, M.D.
1880-1957

Otis Guy Bacon, 76-year-old pioneer physician who had lived in Frederick since 1919, died July 7, 1957, after an illness of eight months.

Doctor Bacon was born October 20, 1880, in Jonesboro, Tennessee, and received his Doctor of Medicine degree from the University of Louisville, Kentucky, in 1907. He entered practice at Cameron, Texas, but moved to Oklahoma the next year, settling in Davidson. In 1919 he moved there to Frederick where he practiced until his illness.

Doctor Bacon was a member of the Tillman County Medical Society, a life member of the Oklahoma State Medical Association, and a member of the American Medical Association.

ROBERT WILLIAM HEAD, M.D.
1923-1957

Robert William Head, M.D., thirty-three year old Blanchard physician, died in Oklahoma City on June 18, 1957.

Doctor Head was born in Paris, Texas, on December 18, 1923, and graduated from the University of Oklahoma School of Medicine in 1948.

Doctor Head is survived by his wife and three children.

SAMUEL LEE BURNS, M.D.
1876-1957

Samuel Lee Burns, M.D., 81, of Stonewall died July 6, 1957, in Ada.

Born in Arkansas, Doctor Burns began practice of medicine in 1898 after graduating from Vanderbilt University School of Medicine.

Doctor Burns was a member of the Fifty Year Club, the Pontotoc-Murray County Medical Society, a life member of the Oklahoma State Medical Association, and a member of the American Medical Association.

CHARLES M. MING, M.D.
1889-1957

Charles M. Ming, M.D., 68, retired Okmulgee physician died May 27, 1957.

Doctor Ming was born in Clinton, Missouri and graduated from Washington University Medical school, St. Louis, Missouri. He moved to Okmulgee in 1911 where he began the practice of medicine.

Doctor Ming was a member of the Okmulgee County Medical Society, the Oklahoma State Medical Association and the American Medical Association. He also was a member in the Alpha Omega Alpha, an honorary medical fraternity, and Church of the Redeemer, Episcopal, and was a diplomate of the American Board of Roentgenology.

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Guest Speakers Announced For City Clinical Society Meeting

Guest speakers for the 27th Annual Meeting of the Oklahoma City Clinical Society meeting which will be held in the Biltmore Hotel, Oklahoma City, on October 28, 29, and 30, 1957, were announced recently. Scheduled to speak at the meeting are:

Harry E. Bacon, M.D., Philadelphia, Pa. Professor and Head, Dept. of Rectal and Colonic Surgery, Temple University; David M. Posworth, M.D., Professor and Director Orthopedic Surgery New York Polyclinic Graduate Medical School and Hospital, New York City; Carleton B. Chapman, M.D., University of Texas Southwestern Medical School, Professor of Medicine, University of Texas Southwestern Medical School, Dallas, Tex.; Frank C. Coleman, M.D., Ass't. Clinical Professor, Dept. of Pathology, University of Nebraska College of Medicine, Omaha, Nebraska; Edmond L. Cooper, M.D., Instructor in Ophthalmology, Wayne University College of Medicine, Detroit, Mich.; James L. Dennis, M.D., Medical Director of Children's Hospital of the East Bay, Oakland, Calif.; James E. Eckenhoff, M.D., Prof. of Anesthesiology, University of Pennsylvania School of Medicine, Philadelphia, Pa.; Isadore Lampe, M.D., Prof. of Radiology, University of Michigan Medical School, Ann Arbor, Mich.; Milton L. McCall, M.D., Professor and Head, Dept. of Ob & Gyn., Louisiana State University School of Medicine, New Orleans, La.; Edmund R. Novak, M.D., Instructor in Gynecology at Johns Hopkins Hospital, Baltimore, Maryland; Rees B. Rees, M.D., Assoc. Clinical Professor and Chairman of the Sub-Department of Dermatology, University of California School of Medicine, San Francisco, Calif.; Harry W. Southwick, M.D., Assoc. Professor of Surgery, University of Illinois College of Medicine, Chicago, Ill.; Homer Swanson, M.D., Assoc. Professor in (Neurological) Surgery, Emory University Medical School, Atlanta, Ga.; Theodore E. Walsh, M.D., Professor and Head, Dept. of Otolaryngology, Washington University School of Medicine, St. Louis, Mo.; Austin S. Weisberger, M.D., Assoc. Professor of Medicine, Western Reserve University School of Medicine, Cleveland; Kenneth McFarland, Ph.D.,

Atomic Reactor to Be Used For Education at O.S.U.

The Aerojet-General Nucleonics corporation's AGN-201 reactor displayed at the "Cavalcade of Health" will form the core of laboratory instruction in Nuclear Engineering at Oklahoma State University, Stillwater.

Oklahoma State has provided instruction in nuclear physics for many years, and in 1955 instituted courses in nuclear reactor engineering and technology. These course offerings are being expanded and the Oklahoma State college of engineering is currently seeking approval of a program leading to a Master of Science degree in Nuclear Engineering.

Under this new program graduate students will receive a full year of instruction in nuclear physics, advanced mathematics, radiochemistry, nuclear reactor theory and technology of the nuclear industry.

Laboratory experiments accompanying the nuclear reactor theory courses will be centered around the AGN-201 reactor laboratory at Oklahoma State.

These experiments will be designed to demonstrate the basic principles of nuclear reactors and to give the students experience in measuring radioactivity.

Typical of work which will be done by the nuclear engineering students are experiments in measurement of the fundamental constants characterizing reactors, in radiological survey of reactors, and in operating behavior of the devices.

The nuclear engineering laboratories, including purchase of the \$95,000 AGN-201, and a new laboratory for nuclear physics instruction were made possible by a \$144,850 grant to Oklahoma State by the US Atomic Energy commission.

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25 YEARS
AGO



Articles published in *The Journal* of the Oklahoma State Medical Association July, 1932. Edited by John C. Matt, M.D., Tulsa.

**Some Recent Advances in the Treatment of
Pulmonary Tuberculosis
R. M. SHEPARD, Tulsa**

"The fundamental principles in the treatment of diseases of the lungs are the same that have existed for centuries, that is the triad: fresh air, good food, and rest. All the modern methods of treatment are based upon the extent and character of the disease and the method of obtaining the maximum amount of rest for the lung lesion itself. The X-ray has been a great boon to the study of diseases of the chest. Misguided is the chest specialist who attempts to treat disease of the lungs without the aid of the X-ray. It will show many conditions that cannot be found with the stethoscope and general examination. However we must not depend on the X-ray alone for the entire story. The X-ray should not make a diagnosis nor give the degree of healing or activity, however, serial plates will show the progress.

The treatment of any lung disease should not be undertaken without first securing a satisfactory stereogram of the chest, regardless of the physical findings and clinical symptoms. With an intelligent interpretation of the films with due consideration for symptoms, complications, and physical findings the method of treatment can be planned. After the routine bed rest and the usual dietetic and postural rest regime the more valuable methods are compression or local rest of the lung or diseased area by artificial pneumothorax, phrenicectomy, intrapleural pneumolysis, multiple intercostal neurectomy, thoracoplasty, and oleothorax.

Artificial Pneumothorax

Artificial pneumothorax at this time is the outstanding method of treatment of tuberculosis. It is a known fact that 60% of the cases of active pulmonary tuberculosis should have artificial pneumothorax compression of the lung. The selection of cases for pneumothorax, and the indications for its use, should be based upon the condition of the patient and the extent of involvement and not upon the endeavor for good statistics.

Since the World War the therapeutic value of artificial pneumothorax in the treatment of pulmonary tuberculosis has become so well recognized that it is a part of equipment of practically every chest specialist in the world . . .

The use of pneumothorax in lung abscesses and bronchiectasis must be carefully considered and administered only in cases where there is adequate drainage to the bronchus or abscessed near the hilus. Most patients will see a marked decline in their temperature, cough, and expectoration after pneumothorax has been administered, however, there usually is some disturbance of the appetite with a slight loss of weight during the first few treatments. In large cavities, beneath the pleura, of long standing and an active infection in the contra-lateral lung pneumothorax is hazardous because more likely there will be pleural adhesions near the cavity and tuberculous pleuritis will subsequently develop by the tubercle bacilli permeating the cavity wall into the pleural space, or rupture of the pleural wall in stripping the visceral from the parietal pleura by the air . . .

Phrenicectomy

Phrenicectomy is indicated in basal infection of tuberculosis, bronchiectasis, lung abscess near the base or hilus, and in cavities that cannot be closed by artificial pneumothorax, or where there are so many adhesions between the visceral and parietal pleura that air cannot be injected. The phrenic nerve is severed and the lower end extracted together with any accessory branches. Radical phrenicectomy will reduce the lung volume from 20 to 30% with the immobilization of the hemi-diaphragm and a rise of the diaphragm into the chest cavity. There is very little results obtained by the phrenicectomy when the diaphragm is fixed or adhered to the base of the lung and chest wall. There is also a lack of results when done in an acute exudative pulmonary tuberculosis. The writer has found that 90% of the cases operated had a great reduction in the cough within twenty-four hours after the operation. There is also a sense of relief in the chest in which the operation is done immediately following the operation with a significant diminution of sputum. Although phrenicectomy is more valuable to close cavities at the base the writer has seen many large cavities at the apex closed by the operation. We must remember that phrenicectomy should be used as an adjunct or substitute for pneumothorax when artificial pneumothorax is impossible and never to supplant artificial pneumothorax. . . .

Thoracoplasty

Thoracoplasty has won a valuable position in the treatment of tuberculosis in cases of unilateral activity where other methods such as artificial pneumothorax, phrenicectomy, intrapleural pneumolysis and multiple intercostal neuroectomy have failed. Thoracoplasty is usually done in two or more stages. A section of all the ribs from first to eleventh inclusive are removed. In view of the fact that all cavities should be closed by some means of interference thoracoplasty will often do it when other methods have failed. However, it is imperative that the contralateral lung be free from any activity and the patient free from any tuberculous com-

plications. It has been of great value in cases where there is large perforations from the lung with subsequent infection and empyemias of the pleura. However, thoracoplasty should not be done until the pleura has been sterilized by the administration of oil—Gomenol. Thoracoplasty as a rule should be preceded by a phrenicectomy and less extensively done on the right side of the chest because of the right heart muscle being thinner and having less resistance to pressure produced by the removal of large amount of ribs. It is an operation not to be considered lightly, but will cure many otherwise hopeless cases.

Summary

To sum up the results obtained by the various methods of treatment it seems that compression represents the best recent advance. There is no treatment to equal artificial pneumothorax in the cases where it can be successfully administered, and no other treatment should be substituted or used until pneumothorax has been tried. A patient with an open cavity and tubercle bacilli in the sputum has about one chance in five to live as much as three years unless the cavity is closed or sterilized by some method. Furthermore ridding the sputum of tubercle bacilli will save the infection of many children and others with whom they come in contact. The physician who would treat tuberculosis must keep informed of the advance in various methods for each month brings new experiences and methods of immense value to the public and patient."

Editorial Notes—Personal and General

"Physicians of Okmulgee entertained physicians from neighboring counties at a golf tournament, with all the trimmings, June 16th.

Doctors F. W. Ewing, M. K. Thompson, and C. E. White, Muskogee, have returned from a fishing trip on the Kiamichi river, where they spent a week in June.

Dr. L. J. Moorman, Oklahoma City, dean of the University of Oklahoma School of Medicine, was elected president of the National Tuberculosis Association at the annual convention in Colorado Springs, Colorado, in June.

Jackson County Medical Society met May 3rd at Waurika. Dr. E. C. Mabry, Secretary, announced the following program:

"Specific Urethritis and Complications" by Dr. W. P. Rudell, discussed by Drs. J. R. Reed and L. H. McConnell.

"Breech Presentations Management" presented by Dr. Jesse Bird, discussed by Drs. E. S. Crowe and Knox Collier."

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FOR SALE: Physician's instruments and office equipment. Mrs. Melvin Fry, 2007 S.W. 15, Oklahoma City, Okla. Phone CEntral 2-9284.

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SMALL COMMUNITY near metropolitan area needs general practitioner. Office available in drug store; will design to suit physician's needs. Plenty of parking area. rWrite box Z, c/o THE JOURNAL, P. O. Box 9696, Shartel Station, Oklahoma City.

WANTED General Practitioner to give anesthetic in private clinic. Please advise qualifications in first letter. Box D, c/o THE JOURNAL, P. O. Box 9696, Shartel Station, Oklahoma City, Okla.

PHYSICIAN PLACEMENT

Anesthesio

Daniel B. Perry, Residence Quarters, Harlem Hospital, New York, N. Y., age 48, Meharry Medical College, 1948, interned at Harlem Hospital, New York and served residency in anesthesia there, veteran, available December, 1957.

General Practice

Louis Marshall Cuvillier, Jr., 1407 Woodside Parkway, Silver Spring, Maryland, age 44, married, George Washington University School of Medicine, 1938, interned at Garfield Memorial Hospital, Washington, D.C., one year residency in medicine and obstetrics at Norfolk General Hospital, Norfolk, Virginia. Veteran, available upon 90 day notice.

Orby L. Butcher, Jr., 3106 Alaska, Dallas, Texas, age 29, married, University of Oklahoma, 1955, now in surgical residency at VA Hospital in Dallas, Veteran. Available, July, 1957.

David L. Mossman, USAH, Orthopedic Department, Ft. Riley, Kansas, age 28, married, University of Vermont, 1954, available upon separation from service, December, 1957.

Robert R. Rupp, 1235 N. Lorraine, Wichita, Kansas, age 30, married, University of Oklahoma, 1956, internship at Wesley Hospital, Wichita, veteran, available, July 1, 1957.

Internal Medicine

Rensselaer, W. M. Clure, Mayo Foundation, Rochester, Minnesota, age 31, married, University of Kansas, 1948, veteran, available July 1, 1957.

James E. Morris, Jr., 1034 Second St., S.E., Moultrie, Georgia, age 26, married, University of Tennessee College of Medicine, 1953, one year internal medicine residency, now serving military obligation, available February, 1957.

Robert W. Datesman, 94 Oak Street, Westwood, Massachusetts, age 30, married, University of Pennsylvania, 1951, residency training at University of Minnesota Hospitals, and Boston Veteran Hospital, Veteran, available in July, 1957.

Joseph A. Ezzo, 3215 Nebraska, St. Louis 18, Missouri, age 32, married, St. Louis University, residency at St. Louis City Hospital and St. Louis University Hospitals, veteran, available, July 1, 1957.

Obstetrics-Gynecology

John P. Harrod, Jr., 932 E. 56th Street, Chicago 37, Illinois, age 33, married, University of Georgia, 1946, served residency at University Hospital, Augusta, Ga., Duval County Hospital, Jacksonville, Florida and at Chicago Lyons-In Hospital, Board certified, veteran, availability date unknown.

Bernard Martin Davis, Jr., 101 Turnbridge Rd., Baltimore 12, Maryland, age 31, married, Georgetown University, 1951, 3 years residency at University Hospital, Baltimore, veteran, available, July 1, 1957.

Pediatrics

Robert W. Mosely, 211 Adams Street, Galax, Virginia, age 32, married, Medical College of Virginia, 1948, residency at Walter Reed Army Hospital, Board eligible, interested in private practice or public health, veteran, available April, 1957.

Surgery

Aristides Cardona, 106 Sinis Rd., Syracuse, New York, age 30, married, State University of New York, 1951, Board eligible, wants additional residency, veteran, available, June, 1957.

Vernon L. Guynn, 2026 S. Second Ave., Maywood, Ill., age 32, married, University of Illinois, 1947, passed Part I of General Surgery Board, military obligation served, available January 1, 1957.

Alvin S. Natanson, 49 Kiernan Drive, Rantoul, Illinois, age 36, married, Tufts Medical College, 1949, residency training at Boston City Hospital, Diplomate of the American Board of Surgery, available upon separation from service, July, 1957.

James Firth Alexander, Charity Hospital, New Orleans, Louisiana, age 34, single, Ohio State, 1949, in orthopedic residency training now, veteran, available immediately.

Karl Edwin Blake, 2681 Crosby Avenue, Pittsburgh 16, Pa., age 33, married, University of Pittsburgh, 1948, residency at VA Hospital and Children's Hospital, Pittsburgh, Board Eligible, veteran, available May, 1957.

Urology

John C. Brazos, 406 South Washington, Watertown, Wisconsin, age 36, married, University of Illinois, 1949, interned at Anckee County Hospital, St. Paul, Minnesota, residency at Milwaukee County Hospital, Milwaukee, Wisconsin. Veteran, available upon completion of residency, July 31, 1957.

Paul Lucian Livingston, 18340 Lake Chabot Road, Castro Valley, California, age 35, married, New York Medical College, 1946, served residencies at Orange Memorial Hospital, New Jersey and at Veterans' Administration Hospital, Long Beach, California, now Assistant Chief Urologist at V.A. Hospital, Board Qualified, veteran, available upon sixty days notice.

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PROCEEDINGS OF THE HOUSE OF DELEGATES OKLAHOMA STATE MEDICAL ASSOCIATION

CLOSING SESSION

May 6, 1957

The closing session of the 51st Annual Session of the House of Delegates of the Oklahoma State Medical Association was called to order at 8:00 p.m. in the Pompeian Room of the Mayo Hotel in Tulsa, Oklahoma, May 5, 1957, by the Speaker of the House, Clinton Gallaher, M.D.

The Credentials Committee reported a quorum was present.

Doctor Gallaher called for introduction of additional guests. None were presented.

Doctor Gallaher announced that the reports from the Committees would continue.

The first report to be presented was from the American Medical Education Foundation Committee. The Report was delivered by the Chairman, Joe L. Duer, M.D., Woodward.

American Medical Education Foundation Committee

At the 1956 meeting of the House of Delegates, \$500.00 was appropriated for the promotion of the AMEF in Oklahoma. An estimated \$170 was spent on one mailing for that purpose, leaving a balance of \$330 not used.

This mailing was made in December, 1956 and consisted of a letter to each County Secretary, and to each member of the Oklahoma State Medical Association. It produced a total of \$425 in contributions to the AMEF; the best monthly contribution ever made in Oklahoma.

Oklahoma remains near the bottom of the list in contributions. The total contributions for 1956 was \$1,451. Of this sum \$741 was contributed by the Woman's Auxiliary, leaving a balance of \$710 from the Medical Profession.

Total contributions earmarked for Oklahoma University School of Medicine amounted to \$6,501.00. Since funds provided by the Woman's Auxiliary are not usually earmarked, this means that out of State contributions provided a total of \$5,971, while \$710 was contributed by in-state doctors, if all contributions were earmarked for the Oklahoma University School of Medicine, which would not be the case.

As of December 31, 1956, AMEF has raised and distributed \$5,757,039.00 since its beginning in 1951. Oklahoma University School of Medicine has received during that time a total of \$162,828.00. Oklahoma has contributed \$6,314.50 ... a very sorry figure indeed.

Your Committee recommends that every physician in Oklahoma be urged and encouraged to contribute annually through the AMEF at least \$25, or as an alternative, one percent of the physicians Federal income tax per year. This would be a meager price indeed to prevent federalization of our medical schools, and a much more meager price as compared to an increase of taxes to support such a plan.

Voluntary contributions for the support of the Medical Schools are the least and best chance we have to prevent federalization. It can be done at very little cost to anyone.

Your Committee requests, urgently, that continued financial support be given and that the Association take much more aggressive action in furthering the sponsoring of this cause. Your Committee is aware that there are variances in opinion about the manner of distribution of these funds, and the manner in which they are handled. It is the considered opinion of your Committee that the primary objective for which funds are needed, and the very objectionable features of any alternate governmental plan should far outweigh any personal opinions as to some of the problems of management of such funds. Such problems could well be altered in the future, while a governmental plan would not only be permanent but would increase in its objectionable features as time passed.

This report is respectfully submitted. I move its acceptance, and that the recommendations herein made be fully considered.

The motion of acceptance made by Doctor Duer was duly seconded and carried.

In subsequent comments in which the matter of correlation between the Medical School and the Association was discussed, the following motion was offered by Doctor Marshall O. Hart: "The President of the Oklahoma State Medical Association appoint a Committee to study the work, and correlate the activities of the Medical School and the Association, further, that this be a study Committee. The motion was seconded.

The Chair recognized Doctor Malcom E. Phelps, who stated, that he felt the intent of the motion was excellent, but offered the following as a substitute motion: "The House of Delegates communicate with the Dean of the Medical School and advise him that the Association is ready to assist him if he so desires. This motion was seconded and carried.

Doctor Gallaher called for the next report, which

was from the Committee on Military Affairs, and in the absence of the Chairman, Doctor F. Redding Hood, Oklahoma City, the report was read by the Recording Secretary.

Military Affairs Committee

The Committee on Military Affairs has not had occasion to meet during the past year. However, as the chairman of the Oklahoma Voluntary Advisory Committee, I should like to advise the House of Delegates that the most recent information from Washington is to the effect that the Doctor-Draft Law will be allowed to expire in June of this year. Further information from Washington indicates that there will be an amendment to the present Selective Service Act, which will allow the Selective Service System, through its Local Boards, to call physicians, dentists, veterinarians and allied specialties out of order. This will accomplish practically the same purpose as the Doctor-Draft Law, although it will alleviate the physician from dual jeopardy.

It is not anticipated that there will be another call for additional physicians under the Doctor-Draft Law. The last call was for 15 physicians from Oklahoma, and this call has been met and these physicians will go on active duty in May and June of this year. Of the fifteen called, only two are known to have been in private practice. It is your Chairman's recommendation that this Committee be maintained, although its work may be drastically curtailed.

Following this report, it was moved by Doctor R. W. Goen, Tulsa, that this report be accepted. Motion was duly seconded and carried.

The next report to be heard was from the Committee on Occupational Medicine. In the absence of the Chairman, Doctor Kieffer Davis, Bartlesville, the report was delivered by Mr. Don Blair, Associate Executive Secretary.

Occupational Medicine Committee

The Committee of Occupational Medicine of the Oklahoma State Medical Association was re-established some one and one-half years ago. The members of the Committee are of the opinion that considerable constructive work in the general realm of occupational health could be accomplished through this particular arm of the state organization and accordingly present for your consideration the following proposals for its long range program:

1. Develop a procedure whereby the Committee on Industrial Health could provide consultation or information to those persons forwarding inquiries relative to industrial health problems.

2. Increase membership of the Committee sufficiently to allow establishment of certain subcommittees to develop specific information in the area of (a) workmen's compensation, (b) preventive aspects of industrial health, including physical examination programs, immunization programs, and industrial hygiene, (c) noise in industry.

3. Promote a more mutual understanding of goals

between physicians engaged in the practice of industrial medicine, full-time or part-time, and other physicians, generalists, and specialists, by (a) establishing a speaker's bureau whose members could present programs before meetings of county medical societies, civic clubs, and groups of industrial managers, (b) preparation of program material for the annual state meeting, (c) sponsorship of scientific exhibits on occupational medicine at the state meetings.

4. Integrate the work of the Industrial Health Committee with other scientific committees of the Oklahoma State Medical Association, with whom common interests exist, such as the Committee of Cardiology, Committee on Otolaryngology, Committee on Ophthalmology, Committee on Trauma, etc.

5. Prepare a refresher course in industrial medicine and surgery for the physicians engaged in this type of practice, to be held during the annual meeting of the Oklahoma State Medical Association, or at the University of Oklahoma Medical Center at a time other than that of the Annual Meeting, but to be sponsored and publicized by the OSMA.

6. To explore the possibilities of participation in local and state meetings of volunteer health agencies, so that mutual goals can be understood, and industrial health personnel and agency personnel work together in exchanging information.

This Committee respectfully submits this report to you and the governing bodies of the Oklahoma State Medical Association with our recommendations that it be adopted.

Following this report it was moved by Doctor Malcom Phelps that this report be accepted. Motion was seconded and carried.

Doctor Gallaher announced that the next report was from the Committee on Rural and School Health. In the absence of the Chairman, the report was delivered by Mr. Don Blair.

Committee on Rural and School Health

In view of the fact that the Oklahoma State Medical Association had planned to participate in Oklahoma's Semi-Centennial Exposition with an extensive health education show, your Rural and School Health Subcommittee elected to forego the sponsoring of the Rural Health Conference as has been the Committee's prime project for the past three years. Since the Rural Health Conference is primarily a health education show, directed to the laity, it was the feeling of the Committee that such action in 1957 would result in a duplication of effort in the light of the Association's "Cavalcade of Health".

The Committee believes however, that the State Association's Rural Health efforts should be resumed in the coming year and urges continued endorsement by the House of Delegates.

At the conclusion of this report it was moved by Doctor Goen that the report be accepted. The motion was duly seconded and carried.

Doctor Gallaher turned the Chair to Doctor J. Hoyle Carlock, Vice-Speaker of the House of Delegates.

Doctor Carlock called on Doctor A. T. Baker, Du-rant, Chairman of the Resolutions Committee, for its report.

Resolutions Committee

Doctor Baker read the following Resolution, submitted by the Resolutions Committee:

WHEREAS, The American Medical Association is the parent body of all State Medical Associations, and

WHEREAS, the programs sent to State and County Medical Associations for implementation are meritorious, and

WHEREAS, There are limitations in available personnel, physical facilities, and financial resources of all State Medical Associations and the general public

NOW THEREFORE BE IT RESOLVED, the House of Delegates of the Oklahoma State Medical Association request that the Board of Trustees of the A.M.A. review all programs in the Health Field to be implemented by State and County Medical Associations for the purpose of presenting programs that can be better carried out within the limited framework of the resources of the State and County Medical Associations.

Doctor James R. Colvert moved the adoption of this Resolution. Motion was seconded and carried.

Doctor Baker read the following Resolution which was submitted by the Resolutions Committee:

WHEREAS, Louis H. Ritzhaupt, M.D. has been for more than twenty-five years a member of the Oklahoma Legislature, and

WHEREAS, Doctor Ritzhaupt has always given of his time and ability to public affairs, over and above medical care to his large segment of patients at a personal sacrifice.

NOW THEREFORE BE IT RESOLVED, That the House of Delegates of the Oklahoma State Medical Association recognize the contribution Doctor Ritzhaupt has made to the State of Oklahoma, and commend him for the sacrifice that he has made in behalf of the people of Oklahoma.

It was moved by Doctor Malcom Phelps that this Resolution be adopted, and that a standing vote of commendation be extended to Doctor Ritzhaupt. Motion was seconded and carried.

The next Resolution to be presented by Doctor Baker was submitted by the Oklahoma County Medical Society.

WHEREAS, At the present time the University of Oklahoma Board of Regents does not have a physician representative on this Board, and

WHEREAS, The University of Oklahoma School of Medicine is an important and integral part of the University of Oklahoma, and

WHEREAS, The members of the Oklahoma State Medical Association are vitally interested in the affairs of the University of Oklahoma School of Medicine

NOW THEREFORE BE IT RESOLVED, The Oklahoma State Medical Association in Annual Meeting in Tulsa, May 5, urges and recommends that a doctor of medicine be appointed to the University of Oklahoma Board of Regents, in order that the Board of Regents may be more conversant with the problems of medical education, in order that the welfare of the people of Oklahoma may be better served.

It was moved by Doctor Colvert that this Resolution be adopted, and that a copy of same go to the Governor of the State of Oklahoma. Motion was duly seconded and carried.

Doctor Baker presented the next Resolution, which was submitted by the Oklahoma County Medical Society.

WHEREAS, The Veterans Administration Hospitals are in direct competition with the doctors in the private practice of medicine and surgery as is evidenced by their treatment of Workman's compensation cases and patients with private insurance, and non-service connected patients who can obviously afford private care.

NOW THEREFORE BE IT RESOLVED, That the House of Delegates of the Oklahoma State Medical Association instruct the Delegates to the A.M.A. to bring the matter before the A.M.A., and propose legislation be set up for an admission committee at each VA Hospital to rigidly screen admissions to exclude all workman's compensation cases and non-service connected cases with private insurance company coverage, and non-service connected cases who are able to pay for private care.

BE IT FURTHER RESOLVED, The House of Delegates of the Oklahoma State Medical Association contact their Congressional Delegation setting forth their views in regard to this matter.

The Resolutions Committee recommended the adoption of this resolution.

It was moved by Doctor James Amspacher, Oklahoma City, that this Resolution be adopted. The motion was seconded and carried.

The next Resolution to be presented by Doctor Baker originated in the Resolutions Committee.

WHEREAS, The House of Delegates of the Oklahoma State Medical Association has had brought to its attention the stand taken by the Oklahoma County Medical Society concerning the care of Veterans in the Veterans Administration Hospitals, and

WHEREAS, in addition to the care of veterans in the VA Hospitals, the problem of Veterans with the service, or non-service connected disability, who may be under workmen's compensation or private insurance, or who is financially able to pay for his own medical service, has been presented to the Veterans Administration in its entirety

NOW THEREFORE BE IT RESOLVED, That the House of Delegates of the Oklahoma State Medical Association endorses and commends the action taken by the Oklahoma County Medical Society.

Doctor Baker stated that the Committee on Resolutions recommended the adoption of this Resolution.

It was moved by Doctor Duer that this Resolution be adopted. The motion was duly seconded and carried.

Doctor Baker offered the following resolution, submitted by the Tulsa County Medical Society.

WHEREAS, At the biennial Sessions of the Oklahoma State Legislature many bills are proposed which are of vital interest and concern to Oklahoma Medicine and affiliated professions, and

WHEREAS, There is a need for the prompt dissemination of information about these legislative proposals to the various component county medical societies, to the extent that appropriate actions may be taken for and against such proposals

NOW THEREFORE BE IT RESOLVED, That the Legislative Subcommittee of the Public Policy Committee of the Oklahoma State Medical Association publish an informative newsletter during each session of the Oklahoma State Legislature, said newsletter to be published at frequent intervals, and

BE IT FURTHER RESOLVED, That the said newsletter set forth the details of all bills proposed which are of interest to Oklahoma Medicine, along with appropriate comment and information, including any information as to the official positions adopted by the Association on particular bills, and

BE IT FURTHER RESOLVED, This newsletter be mailed to the officers of all component county medical societies and to members of legislative committees of the component societies.

The Committee on Resolutions felt that in view of the report of the Public Policy Committee which accepted the intent and purpose of this Resolution, there need be no further action on this matter.

It was moved by Doctor Colvert that the Resolution be adopted, and that said publication be sent to all members of the Association. Motion was seconded and carried.

The next Resolution to be read by Doctor Baker was submitted by the Comanche-Cotton County Medical Society.

WHEREAS, The physicians of Comanche County, State of Oklahoma have attended considerable numbers of patients under the Medicare plan based on Public Law 569, 84th Congress, and feel they are more conversant with problems produced by it, and

WHEREAS, it is probable that any extensions of this plan, or establishment of a similar plan, to include other government employees and/or their dependents, veterans, members of the household of military personnel other than wife and dependent children, would inevitably result in more complete socialization of medical services to the American people, and

WHEREAS, We, as physicians, taxpayers, veterans and American citizens, desire to support the current Medicare system as a recruiting in-

strument and economic solution to the medical problems of military dependents, therefore

BE IT RESOLVED That we are opposed to extension of such plan to include more than those presently included, and

BE IT FURTHER RESOLVED, That deviation from the proper doctor-patient relationship is deplored.

It was the recommendation of the Resolutions Committee that this Resolution be accepted.

The adoption of this Resolution was moved by Doctor Malcom Phelps. Motion was seconded and carried.

The next Resolution to be offered by Doctor Baker was submitted by the Legislative Committee.

WHEREAS, This subject has been of much interest to Oklahoma doctors with many divergent views of individual physicians as to the future course of official medical policy in this regard, and

WHEREAS, It is desirable that the delegates from Oklahoma to the A.M.A. be instructed as to the wishes of their constituents,

NOW THEREFORE be it resolved that the subject of participation of medical doctors in the Federal Social Security System on a compulsory basis be introduced for discussion at the House of Delegates of the Oklahoma State Medical Association on Sunday, May 5, and

BE IT FURTHER RESOLVED, That the House of Delegates instruct the delegates from Oklahoma to the House of Delegates of the A.M.A. that its members favor participation in Federal Social Security on a compulsory basis.

Doctor Baker advised that the Resolutions Committee was unanimous in recommending that this Resolution not be adopted, and the Committee moved by unanimous vote that the Delegates from the Oklahoma State Medical Association to the House of Delegates of the A.M.A. be instructed to vote against the inclusion of physicians in Social Security.

Following the reading of this Resolution, and subsequent comment concerning the Resolution and the recommendation of the Committee, it was moved by Doctor Colvert that the last paragraph of the Resolution be amended to read: "Our Delegates to the A.M.A. be instructed by our vote to vigorously oppose at any national A.M.A. meeting, any Resolution favoring effort to bring doctors under Social Security." The motion was duly seconded.

Doctor John F. Burton spoke briefly concerning Social Security and subsequently moved that Doctor Colvert's motion be tabled and the original motion as recommended by the Resolutions Committee be adopted.

Doctor Ritzhaupt rose to a point of order stating that a motion could not be made following an address.

Doctor Burton, as a result of the point of order, moved that Doctor Colvert's motion be tabled and the original motion as recommended by the Resolutions Committee be adopted. The motion was duly seconded.

At the beginning of the discussion, Doctor Marvin Glismann, Oklahoma City, rose to a point of order stating that a motion to table was not discussable.

There followed a motion that the vote be by secret ballot, made by Doctor Colvert. This motion was subsequently lost.

The motion as stated by Doctor Burton was voted on by a show of hands and carried.

The next Resolution was presented by Doctor Baker. This Resolution originated in the Resolutions Committee.

WHEREAS, The health of the people of Oklahoma is dependent on the activities of the Public Health Department in the preventive field, and

WHEREAS, The medical profession of the State of Oklahoma is likewise alert to the same program.

NOW THEREFORE BE IT RESOLVED, That the program of the Oklahoma State Department of Health and the intents and purposes of the medical profession be coordinated to the extent that the people of Oklahoma will have the best and most curative program possible.

It was moved by Doctor Ritzhaupt that this Resolution be adopted. The motion was seconded and carried.

This concluded the report of the Resolutions Committee.

Doctor Carlock turned the Chair back to the Speaker, Doctor Gallaher.

Doctor Gallaher stated that next on the Agenda of the House was the report from the Committee on Constitution and By-Laws. This report given by the Chairman, Doctor William T. Gill of Ada.

Doctor Gill stated that all amendments to the By-Laws had been introduced at the previous session.

This proposed amendment to the Constitution was duly presented to the Annual Session of the 1956 House of Delegates.

AMEND Article V, Section 1 of the Constitution by adding after the words "The Oklahoma Delegates" and before the word "to", the following: "and alternates".

Doctor Gill moved the adoption of this amendment. The motion was seconded and carried by a two-thirds majority of the Delegates.

This proposed amendment to the Constitution was presented to the Annual Session of the House.

AMEND Article VI, Section 1 of the Constitution to read:

"Section 1. The Council shall consist of one Councilor and one Vice-Councilor elected from each Councilor District, The President, Vice-President, President-Elect, Secretary-Treasurer, Speaker of the House, Vice-Speaker of the House, and the Delegates and Alternates of the Oklahoma State Medical Association to the American Medical Association."

Doctor Gill moved the adoption of this Amendment. It was duly seconded and carried by a two-thirds majority of the Delegates registered.

The following three proposed amendments to the constitution were then presented to the House of Delegates for action at 1958 Annual Session of the House of Delegates.

AMEND Article VI, Section 1, of the Constitution by deleting the words "and" before the words "the Delegates", and add at the end of the section.

"The Editor-in-Chief of the *Journal* and most recent two past Presidents of the Association."

AMEND Article V, Section 2, of the Constitution by adding at the end of the section, "and may remove them from office for cause."

AMEND Article VIII of the Constitution by adding: "Section 5. Any General officer of the Association may be removed from office for cause."

Necessary Amendments to the By-laws which will be required if these Constitutional Amendments are adopted have been prepared for presentation to the House of Delegates next year.

This Amendment to the By-laws, having been read to the previous Session of the House of Delegates is presented for final action. Its purpose is to give the Council direct disciplinary power over members of component societies.

AMEND Chapter VII, Section 5, of the By-Laws by identifying present subsections (c) and (d) as subsections (d) and (e), respectively, and adding subsection (c) as follows:

"(c). If the conduct of any member of the Association reflects adversely upon the reputation of the Association or the medical profession, the Council may consider directly any charges which may be preferred against him, and, upon finding him guilty of unprofessional or unethical conduct, may discipline him by suspension of or expulsion from membership in his component society, or otherwise. Discipline ordered by the Council shall be binding upon the component society, subject to its right of appeal to the House of Delegates of the Association, the Judicial Council or other appropriate body of the American Medical Association."

Doctor Gill moved the adoption of this Amendment. It was duly seconded and discussion ensued.

Doctor Ritzhaupt then moved that any further action on this amendment be postponed for one year, and that in the interim the matter be referred for an opinion by the Attorneys of the Association. This motion was duly seconded and carried.

The next proposed Amendment to the By-Laws was presented at the 1956 Session of the House of Delegates, and action was postponed for a year to permit more mature consideration. It is now ready for action.

AMEND Chapter I, Section 3 of the By-Laws by deleting Subsection (c), and,

AMEND Chapter II, Section 3 of the By-Laws by substituting for the words, "Honorary Members" and "Honorary Membership", wherever they appear, the words "Honorary Life Members" and "Honorary Life Membership", and by deleting in subsection (b) the following words:

"and whose service to humanity and the medical profession has been so unusually outstanding as

to merit honorary recognition may be placed on the honorary membership roll," and inserting in lieu thereof,

"and whose service to humanity and his profession has been conducted with dignity and honor may be placed on the honorary life membership roll."

AMEND Chapter III, Section 6 of the By-Laws by identifying it as subsection (a), and adding thereto, subsection (b), as follows:

"(b) Accomplishments in the field of medicine may be recognized by an award of a certificate of accomplishment. Such an award shall be initiated by a component society, approved by the Council prior to the Annual Session, and voted by the House of Delegates. To be eligible for such award, a physician shall have been a member of the Association for not less than five years immediately preceeding his recommendation therefore."

Doctor Gill moved the adoption of these amendments. The motion was duly seconded and carried.

Doctor Gill then reported that the Grievance Committee has been less efficient during the past year, during which it had been composed of seven regional members, than previously when it was composed of the living five past Presidents, and that the Council was of the opinion that the House of Delegates should consider reverting to the original plan of membership of this Committee. The plan for 1956-57 had been adopted by adopting the report of the Grievance Committee to study the operation of the Grievance Committee, at the closing session in 1956. Although the necessary Amendments to the By-Laws had been made a part of the report such Amendments had never been legally adopted because to amend the By-Laws, it is necessary to introduce the Amendment at one session, and act on it at a subsequent session. Thus, if it was the opinion of the House of Delegates that the original plan be returned to, no Amendments were necessary. However, in view of the attempted change in the membership of the Committee, and the presence of the report in the minutes of the 1956 House of Delegates in order to prevent a later question arising, Doctor Gill moved:

"That all provisions relative to the membership of the Grievance Committee adopted by the House of Delegates at its 1956 Annual Meeting be repealed, and that the Committee be constituted as originally provided by the By-Laws. This motion specifically repeals paragraphs numbered 1 to 7 inclusive, and only those paragraphs, of the Report of the Committee to study Operation of the Grievance Committee submitted to the 1956 House of Delegates."

This motion was duly seconded and carried.

This concluded the report of the Committee on Constitution and By-Laws.

Doctor Gallaher announced as the next order of business the election of officers.

The Speaker called for the election of President-Elect, and announced that the vote would be by secret ballot.

Candidates for this office were: Marshall O. Hart, M.D., Tulsa; and E. C. Mohler, M.D., Ponca City.

Doctor Gallaher requested the Tellers come forward to count the votes.

Following the tabulating of the votes, it was announced by the Chair that E. C. Mohler, M.D. was elected as President-Elect.

Next in order was the election of Vice-President.

It was moved by Doctor E. H. Shuller that the nomination for Vice-President be closed and that the nominee, Doctor A. L. Johnson, El Reno, be elected by acclamation. The motion was duly seconded and carried.

The next office to be filled was that of Secretary-Treasurer.

Doctor J. A. Colvert moved that the nominations be closed and that the nominee, Johnny A. Blue, M.D., Oklahoma City, be elected by acclamation. The motion was duly seconded and carried.

Next office to be filled was that of Delegate to the A.M.A., the nominee for this office being Malcom E. Phelps, M.D., El Reno. It was moved by Doctor A. L. Johnson that the nomination be closed and Doctor Phelps be elected by acclamation. The motion was seconded and carried.

Following this it was brought to the attention of the House by the President, Doctor McClure, that the term of the present Delegate, John Flack Burton, M.D., did not expire until January 1, 1958.

At this point Doctor Burton formally presented his resignation to the House of Delegates, as of this date.

It was moved by Doctor Colvert that the resignation of Doctor Burton be accepted with reluctance. The motion was seconded.

Doctor Joe L. Duer moved that the motion be amended to read: "and elect Doctor Phelps to fill the unexpired term left by Doctor Burton's resignation."

The motion was duly seconded and carried.

It was then necessary for Doctor Phelps to resign as Alternate Delegate to the A.M.A. It was moved by Doctor Colvert, and duly seconded, that the resignation of Doctor Phelps as Alternate Delegate be accepted. The motion was carried.

It was moved that the nominations for Alternate Delegate be closed and Doctor R. Q. Goodwin be elected by acclamation as Alternate Delegate to the A.M.A. (Motion made by Doctor Colvert) The motion carried.

It was then moved by Doctor Duer that Doctor R. Q. Goodwin be elected to fill the unexpired term occasioned by the resignation of Doctor Phelps. The motion was seconded and carried.

It was requested by Councilor District 2, that the nominees for election of Councilor and Vice-Councilor from this district be changed to read Councilor—Powell Fry, M.D., and Vice-Councilor—James Murphree, M.D.

Doctor Colvert moved acceptance of this change in nominees. Motion was seconded and carried.

Doctor Hugh Perry of Councilor District 8, asked that his name be withdrawn as nominee for Vice-Councilor and the name of Marshall O. Hart, M.D. be substituted as nominee for Vice-Councilor of that District.

It was moved by Doctor Colvert that the nominations for Councilor and Vice-Councilor be closed, and all nominees be elected by acclamation. The motion was duly seconded and carried.

The following officers were elected:

President-Elect — E. C. Mohler, M.D., Ponca City.

Vice-President — A. L. Johnson, M.D., El Reno.

Secretary-Treasurer — Johnny A. Blue, M.D., Oklahoma City.

Delegate to the A.M.A. — Malcom E. Phelps, M.D., El Reno

Alternate Delegate to the A.M.A. — R. Q. Goodwin, M.D., Okla. City.

Councilor District 2

Councilor — Powell Fry, M.D., Stillwater

Vice-Councilor — J. W. Murphree, M.D., Ponca City

Councilor District 5

Councilor — Ross Deputy, M.D., Clinton

Vice-Councilor — C. Riley Strong, M.D., El Reno

Councilor District 7

Vice-Councilor — E. K. Norfleet, M.D., Bristow

Councilor District 8

Councilor — Wendell L. Smith, M.D., Tulsa

Vice-Councilor — Marshall O. Hart, M.D., Tulsa

Councilor District 9

Vice-Councilor — R. L. Currie, M.D., Sallisaw

Councilor District 11

Councilor — Thomas E. Rhea, M.D., Idabel

Vice Councilor — W. A. Hyde, M.D., Durant

Councilor District 14

Councilor — J. B. Hollis, M.D., Mangum

Vice Councilor — R. R. Hannas, M.D., Sentinel
Thus concluded the election of officers.

Doctor Ritzhaupt moved that a letter go forth to Senator Howard Young commending him for his efficiency and fair method of procedure as Chairman of the Public Health Committee of the State Senate and express appreciation of the Committee as a whole for its interest in the health of the people of Oklahoma.

The motion was duly seconded and carried.

A motion was made by Doctor John F. Burton that the House of Delegates write a letter of appreciation and thanks to the Tulsa County Medical Society for the excellent planning of the Annual Meeting. The motion was seconded and carried.

Doctor Malcom Phelps moved that the retiring officers of the Association be given a vote of thanks for their services for the past year, and that the House of Delegates, herewith endorse the purchase of all equipment during the past year.

The motion was duly seconded and carried.

As this completed the business of the 51st Annual Closing Session of the House of Delegates the meeting was declared, by the Speaker, to be adjourned.

Reported by Bobbie Iselin

EVERY WOMAN

WHO SUFFERS

IN THE

MENOPAUSE

DESERVES

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5645



House of Delegates Kicks Medicine's Laissez-Faire Policy Out the Door

By accepting the Welfare Department's proposal for the medical care of people in the four categories of dependency stipulated in Public Law 880, the House of Delegates has earned organized medicine a rightful place in the councils of men in matters concerning community health. We have acknowledged that social problems can be decided on their merits alone, and a "leave us alone" policy on our part can no longer be taken for granted.

Organized medicine has previously viewed with alarm any change that in any way threatened the status quo. It has been a "leave us alone" policy—a rear guard action. It has always been the same. It was so with Blue Cross. It was so with Blue Shield. A clear-cut example of this laissez-faire policy occurred in preparation of the recent all out campaign to vaccinate the population against polio. The problem was to immunize as many people as possible against polio. Medicine's answer in Oklahoma was conditioned by a desire to maintain the status quo. It should be done in the doctors' offices. The Health Department should be used only where absolutely necessary. Community clinics should be held only where they could not be avoided. Polio Foundation funds should not be used even though there was no money in hand to purchase vaccine for people over 19 who could not afford to pay.

This "leave us alone" policy of organized medicine has been an accepted and well-known characteristic. Problems could never be approached with an open mind. There was really never any point in asking us in. The people concerned already knew what our answer would be. Why ask us in at all? Sometimes they didn't bother to.

It is indeed refreshing to know that the House of Delegates did decide the present

problem on its merits, and by doing so proved that it is possible for us to function effectively as a counseling body. The delegates decided that the fund provided by Public Law 880 is an additional subsistence but its use is restricted; that the old man who has worked hard all his life and the old lady who has kept house and raised her family can pay for the service that they expect to receive. To be unable to do so and to know that one will have to depend on the charity of the doctor and the hospital must be one of the nightmares of the aged. To deny them this is unthinkable even though it is a deviation from status quo.

I, too, fear the socialization of medicine. I believe that the best care is received by the man who selects a competent physician and pays for the service he gets. This is in effect what the Welfare Department is insuring, except that the funds are provided in the same manner as those for securing the other necessities of life for this group of people.

This is the first step of necessary developments in a society which accepts a mandatory retirement age. We are no longer agrarian people and town people with small shops. Many people who are and will be dependent on their social security checks will not have enough to provide for their medical and hospital needs. Although we will argue and fuss over this problem when it comes, I am confident now that this too will be decided on its merits, provided we secure a satisfactory administration of the program that has just been accepted.—BHN

Medical Care for Recipients Of Public Welfare

C. M. Bielstein, *Chairman Medical Care Recipients of Public Welfare Committee*

The action of the House of Delegates, in its meeting on July 21, 1957, in approving a resolution presented by Louis Ritzhaupt, M.D., would seem to necessitate a report to the members concerning this resolution.

The resolutions as presented and approved by the House was as follows:

Doctor Ritzhaupt moved that the House of Delegates of the Association express to the Oklahoma Public Welfare Department the desire of the Oklahoma State Medical Association to assist and cooperate with the Oklahoma Public Welfare Department in continuing adequate medical care to those on the State relief rolls and that the Association will approve the action as outlined by Doctor Bielstein as follows:

1. Recipients will have free choice of physicians.
2. All physicians will maintain the right to accept or reject welfare patients.
3. The program would be an in-patient and hospital care program in licensed general hospitals with admissions to be on a life in danger admission policy (the definition for this, the patient would have to be in such a medical condition that his life was actually in danger).
4. Authorization for admission would be for a period of seven days with reauthorization for another seven days possible under certain circumstances when life was still in danger.
5. Physicians to be paid on the basis of 75% of the Medicare Fee Schedule for surgery, and \$5 a day for acute non-surgical conditions with a limit of ten days on each admission.
6. The Association not enter into a written contract with the Department of Public Welfare.
7. That in instances where a welfare recipient might have prepaid insurance, which would reimburse the physician in an amount greater than the schedule to be paid by the Department of Public Welfare, it shall be left to the physician which method of payment he will elect to accept, but in no instance accepting both.
8. In no instance will the obligation of the patient be discharged since this is considered a resource program and not an indemnity program.

The resolution and its adoption came as a result of the recommendation of the Subcommittee on Medical Care to Public Welfare Recipients. This committee was appointed by the President as instructed by the House of Delegates at its special meeting on October 28, 1956. Its purpose was to advise and assist the Director of Public Welfare of the State of Oklahoma in developing a program of medical care for recipients of the Public Welfare Department.

The need for action on such a program came as a result of the passage of Public Law 880. This law allows for an amendment to the Social Security Act permitting states to earn matching funds up to \$3.00 per month for each adult and \$1.50 for each child on the public welfare rolls.

These funds could be used to develop a Medical Care Program at the state's own discretion and generally according to the in-

dividual state's plan. However, each state's plan necessarily had to conform to the basic principle of Public Law 880 and be given approval on such principle by the Department of Health, Education and Welfare.

The appointment of the committee began a series of preliminary studies seeking information which would make it possible to develop a program acceptable to all concerned.

The first and perhaps the most difficult item to decide was the most urgent "need" as it applied to the State of Oklahoma. The determination of this need was made necessary by the limit of the available funds and by the fact that the committee wished to support the spending of such funds in the manner that would give the recipients the best medical care available, and allow for some payment for services if desired, by those rendering the care. Results of a survey of need were not available because no such survey had been or has been made anywhere in the United States, to our knowledge. As a result of investigative work on the part of the committee as well as the representatives of the hospital group and the Public Welfare Department, it soon became apparent that the most urgent need, as applied to the subject in Oklahoma was that which presented itself when hospitalization became necessary. The Public Welfare recipients seemed capable of maintaining themselves adequately in so far as out patient care, nursing home care, convalescent facility care, etc.

During the preliminary studies, a great many facts and philosophies were discovered by the committee. The most important to us were:

1. Oklahoma with 465 out of each 1000 people over the age of 65 on Public Welfare rolls has a greater percentage of this age group who are recipients than any other state. The total, in this category, changes from month to month but reaches approximately 100,000. It is of interest that a major reason for such a large percentage is not necessarily poverty. A large percentage of these people voted for the tax that made it possible for a pension to be given them when they reached the age of 65, if their worldly goods were not sufficient to provide for them past

that age or any age after 65. These people feel, and rightly so, that they have paid their taxes and otherwise helped Oklahoma grow. They have considered the paying of the sales tax as an insurance or retirement fund and do not feel that it is more than is due them.

2. Once such a law is passed, there is no real choice as to whether or not a program is to be developed in a given state. The weight of opinion and pressure, political or otherwise, will force the adoption of same program. It was most apparent that such pressures were evident in so far as Oklahoma was and is concerned. The fact that some sort of program would be put into effect made it desirable that the Oklahoma State Medical Association have some part in the planning. This would help to channel the provisions of the program into the area of greatest need and would help prevent the program from coming under the control of those less capable of undertaking the dangers so inherent in federal subsidization.
3. There is no experience anywhere which can act as a guide toward predicting the number of recipients who will need care under such a program. While other states have had limited programs on a state basis, very few, if any, have had the available funds to even approach those which are now capable of being "earned" on a matching basis by the individual states. The only statistical figures available in Oklahoma that might apply to such a program are those which have been accumulated through operation of the Oklahoma Blue Cross plan. These statistics seem to indicate that as many as 33% of these recipients over the age of 65 might have some need for hospital care each year. If this proved to be true, the funds for each quarter would be exhausted long before the 120 days had passed. Therefore, it seemed mandatory that, at its onset, the Oklahoma program be rigidly restricted until sufficient time had passed to allow for actual experience to be gained. Thus it was decided that the program should be one which included medical and hospital care of those patients with a life endangering illness. It

also seemed wise to restrict the allowable number of days for which hospitals could expect payment from the funds of this medical care program.

4. At its onset this program was to be considered as a service type program. This would mean that no funds other than those available under Public Law 880 could be used to defray the cost of medical care to the recipients. This presented an intolerable situation for obvious reasons. Late changes in the interpretation of the law changed the concept toward the idea that these funds were to be considered a resource to the recipient. This change allowed for the use of insurance, county funds, and funds from other sources. However, the recipient, who is considered by the law to be medically indigent, is precluded as a resource himself or herself. Of greatest importance to the medical profession was that this change allowed the individual physician to render his average fee and collect from the Public Welfare Department, private insurance, relatives, etc., but not from the recipient directly.
5. The adoption of a fee schedule presented a major problem at the onset of negotiation. It has long been the practice of local, state, and federal agencies to pay only token fees for service to the medical profession. This is becoming more and more intolerable for the reason that the average physician is giving more and more time toward necessary service from which he can expect little or no reimbursement. Since such a practice conforms to the law of diminishing returns, there remains no choice for the physicians but to ultimately increase the cost of medical care to his private patients. Another reason that such token payments are unwise is that it never gives a clear picture of the true cost of good medical care. The members of congress who pass these laws need to know the true cost of such a program which is not subsidized by the medical profession. The problem of a fee schedule was made much easier upon the acceptance by the Public Welfare Department of the Medicare Fee Schedule as an average fee schedule for the State of Oklahoma. By this accept-

ance the Public Welfare Department could make payment for medical services on the basis of this average fee or a percentage thereof. Since the physician is rendering his individual average fee upon which he is allowed to make collections from other sources, it was possible for the committee to avoid the fixing of fees by anyone.

The committee's interpretation of the resolution passed by the House of Delegates is that those recommendations which we presented are approved, but that the House of Delegates wishes the committee to continue in its efforts to improve the principles and practices of the program. The committee will comply to the best of its ability, and it does not consider that the House of Delegates gave complete approval of endorsement to the program.

Council on Medical Service: Medical Care for The Indigent in 1957

In 1956, amendments to the Social Security Act authorized a new method of federal participation in state medical aid for recipients of public assistance. This new system will affect medical care problems in many states. The Council on Medical Service has, therefore, reviewed the pertinent legislation and the regulations, to the extent the latter have been established, in order to inform the states of the limitations and the possibilities of this program. The Council's Committee on Indigent Care, in December, 1956, compiled a series of questions and answers to explain these new amendments and to give a brief history of federal aid to indigent medical care in the United States and forwarded copies to state medical associations. This is a revision of the December draft, and, since federal regulations are not yet complete, this statement will probably be amended from time to time.

This series of questions has two basic sections: a description of the present system of care (effective until July 1, 1957), including definitions of public assistance and a brief history of this type of aid; and a description, so far as regulations have been established, of methods of financing

care possible under the new amendments (after July 1, 1957).

Present Systems

Definitions

1. Who are the "indigent"?

The "indigent" or "needy" are those persons who cannot, through their own or their families' resources, provide for their basic needs—food, clothing, shelter, and medical care. They must have assistance from some other source to survive.

2. Can "indigency" be measured by any national income standard?

It would be very difficult to set up such a standard, because of differences in the cost of living in various areas of the nation. Standards would probably have to be varied to suit individual cities, counties, or states.

3. What are the sources of medical care for the indigent?

The three primary sources are (1) the physicians themselves, who provide much service without charge; (2) governmental assistance; and (3) private charities.

4. How do the physicians provide indigent medical care?

Physicians provide indigent care either through reducing their fees for those patients unable to meet the full costs of medical care or through providing care without any charge, both to office patients and to hospitalized patients in hospitals where the doctors are staff members.

5. What does governmental assistance include?

Governmental assistance includes both federally aided programs, such as care provided under the public assistance programs, and state-financed programs or community-financed assistance such as general assistance. Such specific programs as the Crippled Children's Commission, the Office of Vocational Rehabilitation, the Veterans Administration, and the Unemployment Compensation program, and all other programs which provide some form of publicly financed aid to the indigent, help, in some degree, in meeting costs of medical care (either directly or by payment to the client, who then purchases necessary medical aid directly).

6. What do the private charity programs include?

Private charity includes the work of the voluntary health organizations devoted to the study of specific diseases, local Community Chest agencies, such service organizations as the Lions and Rotary International (which sponsor health programs in particular areas), and such free care as is provided by the hospitals themselves and by private philanthropic organizations.

7. *With what sources of indigent medical care do the 1956 Social Security Amendments concern themselves?*

With public assistance programs only.

8. *What are the public assistance programs?*

These are the four programs authorized by the Social Security Act for which the state, if it decides to establish them, can obtain federal reimbursement of a portion of their costs; they are also known as "categorical assistance" programs.

9. *Why are they called "categorical assistance"?*

Because eligibility for these programs requires not only indigency, but also inclusion in a specific category of dependency. The four eligible categories are indicated by the program titles: Old Age Assistance, Aid to Dependent Children, Aid to the Blind, and Aid to the Permanently and Totally Disabled.

10. *How do these programs differ from the general assistance programs?*

General assistance programs provide aid for persons who are not eligible for one of the four public assistance categories, but who, nonetheless, need aid to subsist. Aid to such persons is, therefore, received from state and community funds, without any federal participation. Most "medical indigents" who receive governmental aid obtain it from such general assistance programs financed by the state and local community.

Background on Federal Assistance

11. *When did federal grants-in-aid become available to states for public assistance?*

In 1935, when the Social Security Act was passed. Federal grants-in-aid to states were offered in the specific categories of needy aged (OAA), needy dependent children (ADC), and needy blind (AB). In 1950, federal grants-in-aid were initiated for state

programs for the permanently and totally disabled (APTD).

12. *Does general assistance receive any federal reimbursement?*

No; general assistance is financed entirely by state or local funds, or by a combination of the two.

13. *Who initiates and administers the public assistance programs?*

The state itself determines which programs it will sponsor and initiates these programs; administration is either at the state level or at the local level with state supervision. The federal government decides whether the state program meets federal specifications and, if so, reimburses part of the costs; it does not administer or initiate the program, nor does it decide which state agency or agencies will administer the programs.

14. *Can a county or municipality initiate an assistance program and secure federal reimbursement?*

No; plans must be submitted by the state and must be in effect in all its political subdivisions.

15. *What part does the federal government play in public assistance?*

The Department of Health, Education and Welfare is responsible for the administration of the four public assistance titles of the Social Security Act. These titles list the requirements states must fulfill if their public assistance programs are to be approved for federal reimbursement. The Department's Bureau of Public Assistance has issued and provided all states with a "Handbook" which interprets the federal laws and specifically outlines the requirements for program approval; revisions are also forwarded to all states as necessary. If a state plan fulfills these requirements, the Secretary of the Treasury reimburses the state on a quarterly basis for a portion of its public assistance expenditures in accordance with the formulas prescribed in the Social Security Act.

16. *How is the federal contribution determined?*

Federal contributions are based on the average monthly grant per person within a given public assistance program, within set per person maximum grants.

For example, under current legislation,

the maximum grant per person matchable for Old Age Assistance, Aid to the Blind, and Aid to the Permanently and Totally Disabled is \$60 per month. Federal aid is based on the amount paid out by the state within this limit. (If a recipient receives more than \$60 in a month, only the \$60 is counted in calculating federal reimbursement.)

Funds allocated, within this maximum, are averaged monthly and the federal government reimburses the state for 4/5 of the first \$30 per person and 1/2 the remainder. Thus, if three OAA recipients received \$75, \$60, and \$45, respectively, in a given month, the average would be based on \$60 (instead of \$75), \$60, and \$45, or an average monthly grant of \$55 per recipient. Of this the state would receive \$24 (4/5 x \$30) plus \$12.50 (1/2 x \$25) per person.

For Aid to Dependent Children, the federal share is 14/17 of the first \$17 of the average monthly payment per person plus 1/2 the balance; the maximums are \$32 each for one dependent child and the adult responsible for his care and \$23 for each additional dependent child in the same home.

For example, in three families, each consisting of a parent and one child and receiving state grants of \$75, \$64, and \$25, respectively, federal participation would be based on \$64 (instead of \$75), \$64, and \$25, since the maximum matchable would be \$32 per person or \$64 for each family. These matchable portions of the grants average \$51 per family or \$25.50 per recipient, so the federal share would be \$14 plus \$4.25 per recipient of \$36.50.

17. *If the grant to one state client is above the maximum matchable and that to another below the maximum matchable, are the grants averaged to determine federal participation?*

No; averaging is based only on the portion of the individual's grant within the federal maximums; if, with a \$60 maximum, the state grants one client \$75 and another \$45, the federal aid is based on the average of \$60 and \$45 (as in the above example), not on \$75 and \$45.

18. *If the average grant per person exceeds the established maximum, is there any increase in federal grants?*

No; the federal grant is limited by the established maximums. State and local

funds must be utilized without federal reimbursement to support recipient grants which exceed the federal matching maximums.

Present Medical Care for the Indigent

19. *Before the inauguration of the public assistance programs in 1935, how did the indigent obtain necessary medical care?*

Medical care was considered primarily a local or community responsibility, usually secondary to such other basic needs as food, clothing, and shelter. Medical care was provided either through community or state programs generally by county or city physicians, in county or city hospitals, and through the charity of local private physicians and hospitals.

20. *How did the public assistance programs affect the method of providing care?*

Within the set "matchable maximums," the states could include grants to public assistance recipients in ratio to their medical needs. The clients could use this grant to pay physicians, pharmacists, or hospitals for medical aid, and the state would receive federal reimbursement according to the established formulas. (However, receipt by the client of an additional state grant for medical needs did not guarantee that he would spend the money for that purpose.)

21. *Did the Social Security Act of 1935 allow states to receive federal reimbursement for money paid directly to physicians or hospitals for indigent medical care?*

No; under the 1935 act, all grants involving federal participation had to be paid directly to the assistance recipient himself, without restriction as to use. If states made direct payments to the "vendors" of medical care, these payments were not eligible for federal matching.

22. *How did the 1950 amendments to the act change this?*

The 1950 Social Security Act amendments allowed states to make payments for medical care "on behalf of" assistance recipients, without forfeiting federal reimbursement. This meant that the state could send a portion of an individual's grant to the physician or hospital which had provided care and still receive federal aid, within the matchable maximum set for that assistance program. (Direct payment by the state to phy-

sicians, hospitals, etc., the "vendors of medical care," is commonly known as "vendor payments for medical care.")

23. *Under these 1950 amendments, what methods could the state use to pay for indigent medical care and remain eligible for federal participation in the costs?*

The state could (1) continue sending the entire grant to the client, who would be expected to meet his own doctors' and hospital bills; (2) pay the physician or hospital directly with a portion of the client's grant; or (3) establish a "pooled fund" to pay medical costs for all clients of a given assistance program.

24. *What is the "pooled fund" system?*

In the pooled fund system, the state establishes a separate fund, to be used only for payment of medical costs for clients of a given assistance program. Into this fund, the state makes a set payment monthly for each person on the rolls of the program during that month; from the fund, medical costs can be met for any client of that program, without regard to the amount paid into the fund per person. The fund may be used for any type of medical costs, as the state decides, limited only by the size of the fund.

For example, if a state allots \$5 per month from the grant for each person on Old Age Assistance rolls and there are 5,000 OAA clients, \$25,000 is paid into the fund monthly. From this fund, the state can pay medical expenses for any OAA recipient without regard to the total amount paid into the fund from his grants; a recipient on the rolls only one month might receive care costing \$200, while one on the rolls a year might need and receive care costing only \$10. Thus, medical costs can be spread over the entire program and money can be expended as needed (within the limits of the fund) while federal reimbursement, on a 50-50 basis, remains proportional to the amount paid into the fund monthly. In addition, unexpended funds are carried forward from month to month.

25. *Prior to July, 1957, is the "pooled fund" separate from the basic public assistance program?*

No; it is merely a possible method of utilizing a portion of the individual's public assistance grant to spread the cost of medical care over the whole of a given program.

26. *Is the state required by the Social Security Act of 1935 or any subsequent amendments to confine its grants to those limits mentioned in the federal reimbursement formulas?*

No; federal "maximums matchable" and "matching formulas" indicate only the degree to which the federal government can reimburse the state for money expended for categorical assistance (whether in direct payments to the recipient or in payments made in his behalf for medical care). There is no limit placed on the funds the state itself may expend for clients of these programs.

1956 Amendments—New Financing Method for Medical Care

Legislative Basis

27. *What effect do the 1956 amendments to the Social Security Act have on medical care for the indigent?*

They establish a new method of financing medical care for clients of the four public assistance programs, distinct financially from the direct monetary assistance paid to the clients themselves. Each of the four public assistance programs is separately amended to allow the states to utilize this new method of financing to provide medical and "remedial" care for clients of that program, if the state so desires. The amendments, therefore, merely specify a new way of financing medical care; they do not establish a separate and distinct program of medical care.

28. *What is the purpose of these amendments?*

As stated in the amendments themselves (Title III, Sec. 300, Public Law 880, 84th Congress), "It is the purpose of this title (a) to promote the health of the nation by assisting States to extend and broaden their provisions for meeting the costs of medical care for persons eligible for public assistance by providing for separate matching of assistance expenditures for medical care . . ." (Note: the term "medical care," as used in the law, does not mean physicians' care only. See question 45.)

29. *When does this new method become effective?*

The new method goes into effect on July 1, 1957.

30. *What effect does this new method*

have on current methods of financing indigent medical care?

When the new method goes into effect on July 1, 1957, any vendor payment, to be eligible for federal reimbursement, must be made through this new system of financing. Public assistance, so far as federal participation is concerned, will be divided into two accounts: direct money grants to recipients and vendor payments for medical care.

31. *May the states still continue such other methods as vendor payment to physicians and hospitals from the individual recipient's grant?*

Yes, but such payments will not be eligible for federal participation. All public assistance monies, to be federally matched, must either be paid directly to the recipient or come under this new matching method.

32. *What does the new matching method provide financially?*

The new matching method provides that the federal government will reimburse the states for half the amount expended by the states for medical and "remedial" care, within the limits formulated in the amendments.

33. *What limits on federal reimbursement are set by these amendments?*

Federal participation applies only to an average monthly expenditure of \$6 per adult client and \$3 per dependent child. Thus, in calculating federal payment to the state, the federal share is half of any medical costs up to \$6 (or \$3) times the number of clients on the rolls during a given month. Any amount above this total expended on medical care in that month is not considered in determining the amount of federal aid.

For example, a state with 200 clients in an approved OAA program during a given month could spend up to \$1,200 ($200 \times \6) on medical costs and still have federal matching on a 50-50 basis; any costs over and above \$1,200 would not be considered in calculating the federal share. With 200 clients, state expenses of \$1,200 would mean a \$600 federal share; \$2,000 from the state would still obtain only \$600 federal reimbursement; \$900 state expenditure would mean a \$450 federal share.

The state may, however, establish or continue a pooled fund to equalize monthly fluctuations in medical care expenditures.

Monies paid into such a fund during a given month will be used (in calculating the federal reimbursement) to determine medical costs rather than the actual vendor payments during that month. If a state's monthly payment into its pooled fund was \$6 each for 200 OAA clients, the federal share would stabilize accordingly at \$600 per month. The rate of expenditure from the fund would not affect the federal reimbursement. (See also question 48.)

34. *Does the size of the state's direct monetary grant to the recipient himself have any effect on these matching funds?*

No, the matching formula for medical care is completely independent of the public assistance rolls, so far as federal reimbursement is concerned. The only correlations are as follows: 1. In a given program, all those on the rolls of that program must also be eligible for the medical services provided. 2. The same agency is responsible for the direct assistance and the medical care program.

Administration

35. *Who established the medical care programs?*

Inauguration of such programs is entirely a state responsibility. The Bureau of Public Assistance has published a "Handbook" listing specifications which have to be met for federal participation; however, the state must itself decide to establish such a program, submit program plans, make the necessary appropriations and submit accounts to the Bureau of Public Assistance. The federal government itself has no authority to initiate or organize these programs.

36. *Who administers the programs?*

The state must perform or supervise all administrative functions and must establish its own regulations. Once the program has been approved, the federal government requires only that one agency be responsible and report for all phases of a given public assistance program, that separate accounts be presented for each public assistance program, in order that federal participation can be determined in accordance with the enabling legislation.

37. *Who, therefore, determines what medical benefits are to be provided?*

The state, except as limited by the specifications and standards issued by the fed-

eral government to the states as a guide in application for federal reimbursement.

Medical Benefits

38. *What medical care may be provided under this act, after July 1?*

This is a matter for the individual state to decide. The main limitation is that the same benefits, within the limits of available facilities, should be provided to all members of a covered program throughout the state. That is, a state could not provide hospitalization for OAA clients in one part of the state and not in another.

39. *Must payments be made in the same way throughout the state?*

No; fee schedules may be varied to suit local conditions or the state may use a prepayment plan in one section and direct payment of physicians or hospitals in another section. Benefits to welfare clients must be uniform, but methods of payment need not be.

40. *Must the state set up medical care programs for all public assistance clients?*

No; since the amendments are appended to the individual public assistance programs, the state may use this new matching method for one program, for all four, or for any combination of the four.

41. *Can general assistance clients or the medically indigent be covered?*

No, if these terms are used in the sense defined in questions 3 and 11, since these types of indigents are not covered by the provisions of the Social Security Act.

Note: A person may have all the qualifications for coverage under a public assistance program (e.g., Old Age Assistance) except the necessary degree of indigency and, therefore, be ineligible for a direct money grant. However, in case of illness, he might become eligible for public assistance for medical care only, and thus would come under the provisions of the medical care programs as a public assistance recipient.

42. *Does a state have to use this method of financing medical care for the indigent?*

No; a state may use whatever method it chooses. However, to obtain federal aid, a program must come under the provisions of this "6-and-3" method, as it is sometimes known. Any other method must be financed wholly from nonfederal sources, except in-

clusion of money payments for medical care in the direct grant to the client himself.

43. *Can a state make vendor payments from the individual client's basic grant?*

No; under the new amendments, all money grants in the basic public assistance program must be made directly to the client without restriction to be eligible for federal reimbursement.

44. *What type of medical benefits may be provided under this act?*

The amendments specify that the federal government may reimburse the state for sums expended "in the form of medical or any other type of remedial care (including expenditures for insurance premiums for such care or the cost thereof)."

45. *What does "medical care" include?*

The range and variety of medical services to be provided is decided by the individual state for each program; it need not provide the same benefits in two different public assistance programs. The extent of services provided is usually governed by the funds available and the need. Among services which can be provided are physician's care in the home, office, or hospital; hospital services; clinic or outpatient care; home nursing; convalescent and nursing home care; rehabilitation; drugs, prescriptions, and prosthetic appliances. Some states have even provided limited dental services, when a dental condition was adversely affecting the patient's health.

46. *What is meant by "remedial" care?*

"Remedial" care is used to indicate care by non-medical practitioners, such as Christian Science healers, in such states as recognize these practitioners and include them in the state's indigent care program.

47. *Must the state provide both physician and hospital services?*

The state decides which services are to be provided as part of the public assistance program, within the limits established in the "Handbook."

Changes Brought About by 1956 Amendments

48. *Have the new amendments affected the utility of "pooled fund" plans?*

Yes; after July 1, 1957, a "pooled fund" will be financially advantageous only to states whose per-recipient medical expenditures average below \$6 some months and

above \$6 in others (or \$3 for dependent children). These states will be able to obtain a somewhat larger federal reimbursement through a pooled fund arrangement than they would using the simple monthly expenditure method of calculating costs. (e. g., a state which averaged \$5 one month and \$7 the next would receive \$2.50 and \$3 in federal money by the simple calculation; a \$6 pooled fund payment would obtain \$3 each month.)

However, states whose per recipient costs always average less than \$6 per month or more than \$6 per month would not gain financially. The former would receive the full 50% of its costs each month without a pooled fund; the latter would receive the maximum federal share of \$3 per month per adult under either method.

49. *May funds for medical care of clients of two programs be combined?*

No; separate accounts must be kept for each program covered, and federal participation is based on the individual program, rather than on all four. Thus, all monies allocated for OAA must be spent on OAA clients only. However, for administrative purposes, federal regulations do not prohibit one agency's administering funds for all four programs, so long as the accounts are kept separately.

50. *How would this apply in the case of insurance coverage (allowed by the law)?*

It would probably mean that separate policy arrangements would be made for each program covered, in order to ensure separate accounts of premiums paid and benefits received for clients within each covered public assistance program.

51. *What is the purpose of this regulation?*

Each public assistance program was established by the Social Security Act as a distinct entity, so that the federal government requires that all OAA funds, for example, be used for OAA clients. Therefore, any method which allowed OAA funds to be utilized in another public assistance program would be disapproved.

52. *What primary qualifications should a state plan have?*

According to present interpretation, the

plan must provide equal benefits to all those covered within a specific program, throughout the state; all clients of that particular public assistance program should be covered; a single agency must be responsible for both direct money grants to the client and the medical care program; and the medical aspects of the program should be under medical supervision.

Aside from this, the federal government attempts to give the state as much leeway as possible in suiting its plan to local needs and facilities.

Summary

The Social Security Amendments of 1956 establish a new method of financing medical care for clients of the four public assistance programs.

In this system, the federal government pays half the amount spent for medical care of public assistance recipients by a state within a quarter, up to maximum of \$6 per month per client average for adults and \$3 per month per client for children. Separate accounting is required for each public assistance program.

The same benefits must be provided for all clients within a given state program, but the methods of payment and fee schedules may differ in locally administered plans within the state. Plans are established and administered or supervised by state agencies, but each state's programs must meet the standards of the Bureau of Public Assistance of the Social Security Administration to be eligible for federal reimbursement. However, the bureau plans to leave its regulations flexible, so that the states may use the new matching method to improve their provision of medical care for the indigent.

The new matching method is effective July 1, 1957.

Note: The Bureau of Public Assistance will continue to formulate new regulations and make policy decisions concerning this matching method; further changes may be made. However, the preceding analysis is accurate insofar as essential information is available at present.

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Scientific Articles

STOP RHEUMATIC FEVER

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This is the slogan of your Oklahoma State Heart Association during its forthcoming year, and your interest is invited to the various activities and facilities of this Association. Beginning with this column, it will be the aim of the editors to review some of the problems in streptococcal infections, rheumatic fever, and rheumatic heart disease—all of which are intimately associated with the program to STOP RHEUMATIC FEVER. Many efforts are being made on the local as well as on the national medical scene in this campaign, and we shall hope to bring some of them to your attention. Your questions and inquiries concerning any details of the information in this and succeeding columns may be addressed to the Oklahoma State Heart Association, 825 N.E. 13th Street, Oklahoma City, and you may be assured that they will be answered.

There are many facets of the problem in STOPPING RHEUMATIC FEVER. While it is entirely clear that a preceding infection by a Group A beta-hemolytic streptococcus is necessary to produce rheumatic fever, there is a great gap in our knowledge as to why some individuals are more prone to streptococcal infections than others. Indeed, some authors have proposed that the offspring of two parents with rheumatic fever *must* receive antibiotic prophylaxis, because the risk of rheumatic fever and its serious sequel of heart disease is nearly 100%. Yet, on the other hand, even following *untreated* streptococcal infections, only about 3 to 5 per cent of individuals proceed to develop these complications. Hence, it is evident that there is a large void in our present knowledge between the relationship of the streptococcus to rheumatic fever and the likelihood that a given individual may contract the disease. We shall hope to explore some of these avenues in subsequent reports.

Another point that has received considerable attention in the medical literature has been the mass prescription of antibiotic prophylaxis against streptococcal infections as

a deterrent to this serious sequel, rheumatic fever. The evidence is now shaping up quite clearly as to the pros and cons, and certain official bodies speaking for physicians and cardiologists at large have definite conclusions. This problem will be reviewed critically in future discussions.

Once rheumatic fever has occurred, however inadvertently, what can we do about it? Are there any forms of modern therapy from our vast pharmaceutical armamentarium that will in any way alleviate either the acute symptoms, abbreviate the duration of the acute episode, or prohibit some of the more severe complications of rheumatic fever, such as the serious forms of valvular heart disease? This too is a subject that has had considerable focus in medical writings, and we believe that there are several messages to be transcribed in this field.

But fundamental to all of these is the early recognition, diagnosis, and adequate therapy of a streptococcal infection in order to STOP RHEUMATIC FEVER. The current evidence for diagnosis on clinical grounds will be reviewed shortly in order that all physicians may be aware of the possibilities of making this diagnosis early without the aid of bacteriologic facilities. This will not only manage the problem of the patient at hand, but will in a larger public health sense tend to eradicate the offending organism from the patient earlier and hence reduce the possibility of spread to other susceptible hosts, who might be the ones most likely to develop rheumatic fever. All of the current diagnostic and therapeutic thinking will be reviewed in succeeding columns.

Rheumatic fever is a problem in Oklahoma today, as it has been for many years.

The funds of the Crippled Children's Commission are still needed to care for many of the children whose lives are marked by this unnecessary ailment. During the past year, there were 46 new cases of rheumatic fever reported to the State Health Department, and one may conclude that many more went unreported for various reasons. On the rolls of the Crippled Children's Commission are carried some 330 patients with rheumatic fever in its various forms and stages, and it is also fair to assume that many other patients, particularly adults, are not included in this number. The problem of rheumatic fever is with us in Oklahoma and will be with us until we are prepared to do something about it. We cannot deny any longer that the risk of an individual having rheu-

matic fever is greater than that of contracting poliomyelitis. All physicians in the state must join the crusade to STOP RHEUMATIC FEVER.

Finally, it should be pointed out that while the columns to follow will seem diverse in content, they all have one goal in common: STOP RHEUMATIC FEVER. The broader the dissemination of information is about the epidemiology, diagnosis, treatment, and prophylaxis of beta-hemolytic streptococcal infections, the sooner we may conquer streptococcal infections and prevent the crippled hearts as we are now conquering and preventing the infection that leads to the crippled legs of poliomyelitis.

This is the first in a series of articles prepared for The Journal in cooperation with the Oklahoma State Heart Association.

ALLERGY and EUERGY

CARROLL M. POUNDERS, M.D.

The attention of not only our state but of the entire nation is focused upon our celebration this year here in Oklahoma of the completion of our first half century of statehood. Preceding this by one year was a semi-centennial date in medical history worth noting. The word allergy is now so commonly used by doctors and lay people that few realize that no such word existed prior to 1906. In that year a pediatrician named von Pirquet¹ coined the word is a combination of two others and means changed or altered reaction. This alteration in capacity to react results from exposure to an exciting agent and is manifested upon re-exposure to the same or to an immunologically related agent.² The substances most commonly thought of as producing such disturbed reactions are foods, house dust, molds, feather dust, animal danders, pollens, insects, drugs and sera. But exposure and re-exposure to these things does not produce this altered type of reaction in the majority of people. From our knowledge of immunology, we can assume that the cells and tissues of these persons do not fail to respond to such exposures but they do so in an orderly or undisturbed manner. Up to now we have had a name for the disturbed type of reaction but none for the orderly type. For my own usage I have adopted the term euergy for this normal type

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of reaction and I offer it for general consideration. People who do not suffer from allergy react in a euergic rather than an allergic manner. Preventive allergy attempts to guide the infant and young child away from the development of allergic reactions and to enable him to form his reactions in an euergic manner. Also our therapy is aimed at converting allergic reactions to the euergic type. It is my feeling that the word euergy, meaning a normal or undisturbed reaction, is just as useful as the word allergy which means an abnormal or disturbed reaction.

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CARDIAC ARRHYTHMIAS

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In the treatment of cardiac arrhythmias, the major point relates to the selection of a limited number of drugs; becoming well-versed in their indications and contra-indications; being familiar with the manifestations of the idiosyncrasies of each drug; knowing the minimum, therapeutic, and toxic doses, and the indications for the use of each preparation. Often, physicians attempt to use too many different preparations of the same drug. Frequently a set plan of therapy does not exist.

Simple paroxysmal atrial tachycardia, at times, will respond to simple mechanical and reflex producing measures (carotid sinus, oculocardiac and vagal stimulation). Paroxysmal atrial tachycardia in infants can be fatal. Lanataside—C (0.01—0.0125 mg. per pound) intravenously in a single injection may be life-saving. If the arrhythmia persists a second injection (one half the initial dose) can be repeated in thirty minutes.

Digitalis Preparations

Basically, two preparations are needed—one for fast action which is quickly eliminated, and a second which is slowly eliminated but requires several hours to become effective. Preparations which I prefer are Ouabain and Digitoxin.

Ouabain (Strophanthin G). A derivative of *Strophanthus gratus*, is available in 2 ml. ampules containing 0.5 mg., and is administered intravenously *ONLY*. This drug is recommended in urgent situations, where rapid digitalization (in 1-3 hours) is desirable and frequently may be life saving. Common examples are acute cardiac failure that occurs in labor of pregnancy, in post-operative surgical cases, and in certain arrhythmias of severe organic heart disease. A reduction in ventricular rate and venous pressure may occur within 5 minutes,¹ the maximum effect in 30 to 120 minutes, and the effects last from 24 to 72 hours.^{2,3} The rapid elimination of Ouabain make it an unsatisfactory preparation for maintenance

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digitalis therapy. The therapeutic dose of Ouabain varies from 0.5 to 1.0 mg. When it is clearly established that no digitalis has been given previously, 0.5 mg. of Ouabain may be given intravenously over a 5 to 10 minute period. Contrary to general belief this interval allows for recirculation and fixation of the Ouabain in the heart muscle rather than an interval to observe for toxic results. Close observation of the patient and monitoring the heart rate with auscultation or with the electrocardiograph is indicated. This dose will digitalize a few patients and give significant relief to many. An increment of 0.25 mg. can be repeated in 30 to 120 minutes, as indicated by the clinical response. On occasion an additional dose of 0.25 mg. will be needed to obtain the desired result. Relief from dyspnea, diffuse rales, cold clammy sweat, and cyanosis, reduction of the heart rate, conversion of the arrhythmia and rise in the blood pressure are usually the most apparent signs of improvement of the patient's condition.

Most patients will require maintenance digitalis therapy. This can be started with the last dose of Ouabain. A slowly eliminated preparation such as digitoxin, digitalis leaf, etc., is desirable. Digitoxin 0.4 mg. orally (or, intravenously, if the oral route is not feasible) every six hours can be started until a digitalizing dose of 0.8 to 2.0 mg. has been given, depending upon the patient's size and sex. The patient then can

be placed on a maintenance dose of 0.05—0.15 mg. per day. Higher maintenance doses are not required except in *rare* instances. Digitoxin is discussed more in detail below.

An additional use for Ouabain: When, for example, a patient with atrial fibrillation with rapid ventricular rate presents himself, in whom the exact status of digitalis therapy is unknown (whether or not the patient is under—or over—digitalized), Ouabain 0.25 mg. can be given intravenously. If the apical rate drops, one can complete digitalization of the patient; if the apical rate remains the same or increases, the patient is already over-digitalized. The drug is excreted rapidly (within 8 to 36 hours) and toxic effects are of brief duration. Atrial fibrillation with a rapid ventricular rate can be a manifestation of digitalis intoxication. If over-digitalization is definitely suspected, the patient can be given 40 mEq. of potassium chloride diluted in 500 ml. of 5% dextrose in distilled water intravenously (run at 40 drops per minute). When the arrhythmia is a manifestation of digitalis intoxication, the rate will decrease significantly with obvious improvement in the patient's condition. Further digitalis for the time being is contra-indicated. If no improvement occurs, further digitalization can be undertaken.

Digitoxin: Digitoxin is a relatively pure crystalline digitalis glycoside of digitalis purpurea leaf obtained by hydrolysis of lanataside-A.⁴ Digitoxin is completely absorbed from the intestinal tract. The oral and intravenous digitalization dose is the same.⁵ Digitoxin is available in tablets of 0.05 mg., 0.1 mg., 0.15 mg., and 0.2 mg., and in ampules containing 0.2 mg. The initial effects are apparent in one hour, full effect in four hours, and dissipation requires two or three weeks. Apparent digitalis effect for as long as six weeks after discontinuing the drug has been reported.⁶ The digitalizing dose varies from 0.8 to 1.5 mg. (rarely 2.0 mg.) in divided doses over a 24-hour period. The maintenance dose varies from less than 0.05 mg. to 0.15 daily. (*Rarely does a patient require a maintenance dose of 0.2 mg. daily*). Digitoxin effect is uniform and practically predictable in its results. There is no nausea or vomiting in therapeutic doses since gastric irritation is not seen. The

signs of over-dosage from this drug (listed in order of occurrence from early to extreme toxicity) are: those involving the central nervous system (vague headache, anorexia, sleeplessness, mental disturbances and neuralgias, nervousness, and scotomata or colored green or yellow vision), cardiac disturbances (premature ventricular beats frequently occurring in bigeminy, excessive slowing of the heart rate, prolonged conduction time (P-R interval), increased ventricular rate, occasionally complete atrio-ventricular heart block with an apex rate of near 40 per minute, paroxysms of atrial fibrillation, ventricular tachycardia and fibrillation, electrical and pulsus alternans and paroxysmal atrial tachycardia with or without a 2:1 block), later gastrointestinal symptoms (nausea, vomiting, and diarrhea), eosinophilia and possibly, thrombotic effects, at least experimentally. Allergic reactions have not been seen by this author, though reported.⁷ These patients are over digitalized. White agrees with this opinion.⁸

I have not encountered untoward effects from the combined use of calcium and digitalis as has been reported.^{9,10}

Quinidine Preparations

Quinine was introduced in 1927 for the treatment of cardiac arrhythmias by Wenckebach.¹¹ Quinidine is a dextrorotatory isomer of quinine and was introduced in 1918 by Frey.¹² Quinidine is more effective than quinine. Quinidine lengthens the refractory period, prolongs the conduction rate of both the atria and ventricles, increases the refractory period of the atrioventricular propagation and depresses the excitability of the atria more than the ventricles. The refractory period of the atria and ventricles is increased long before the conduction is prolonged.¹³ This apparently accounts for the greater effect of quinidine in atrial compared to the ventricular arrhythmias. Quinidine is ordinarily contraindicated in patients with chronic heart disease. The prolongation of the refractory period that is produced by quinidine is directly opposite to the shortening of the refractory period produced by digitalis. Quinidine hastens the interruption of atrial fibrillation and digitalis fosters the arrhythmia. This does not deny the direct effect of digitalis on the A-V conduction resulting in the slowing of the

ventricular rate. Sokolow¹⁴ recommends a dose of 0.4 Gm. every two hours. The dose can vary from 0.2 to 0.6 Gm. every 1 to 2 hours depending upon the urgency of the situation. Determination of serum concentration is the most accurate though impractical approach to the problem of quinidine therapy.^{14,18} Successful conversion to sinus rhythm occurs in 82% of the patients with an average peak serum concentration of 5.9 mg. per liter; 75% convert at levels between 4 and 9 mg. per liter. These levels are obtainable with quinidine dose schedules of 0.4 to 0.6 Gm. every two hours for five doses.¹⁴ Sedation, minimal activity and maintenance quinidine therapy are indicated for a period of observation to ascertain whether the arrhythmia will recur. One to 1.6 Gm. daily in divided doses will usually suffice in preventing immediate recurrences. The obvious desired effect of quinidine therapy is the abolition of the arrhythmia under treatment. The toxic symptoms are those of cinchonism, including tinnitus, impaired hearing, headache, nausea, mild diarrhea, and slight disturbance of vision in the mild cases.

In moderate cases, the former symptoms become more severe, color perception is altered, photophobia and diplopia and abdominal pain develop. The skin is hot and flush-

ed and urticarial, macular, and papular eruptions occur. Fever, confusion and delirium may develop. In extreme cases, respiratory difficulty, cyanosis, cold sweat, tachycardia, atrial flutter and shock are seen.⁸ The latter arrhythmias are less apt to occur if prior digitalization is given. Intraventricular block with widening of the QRS interval to 0.12 seconds or more, cardiac standstill and ventricular fibrillation has been reported from the depressant effect of quinidine. Sudden death is more apt to be due to cardiac asystole than to embolization because of the depressant effect on the sinoatrial and atrioventricular nodes. On the other hand, most deaths reported in the literature were predated by minor toxic symptoms or signs prior to the final dose of the medication. *This is important to keep in mind.* It appears therefore that some of these deaths could have been averted.

Idiosyncrasy, intolerance, toxic reactions including all the minor ones, such as drug fever, mild dermatitis, tinnitus, diarrhea, etc., occur in not more than two percent of the patients. *Quinidine is as safe as most drugs employed by the medical profession! Use it intelligently when indicated!* In my personal experience, I have not seen a death or major complication from quinidine. The custom of giving a test dose of quinidine for

TABLE 1.
SUMMARY of DRUGS for the TREATMENT of CARDIAC ARRHYTHMIAS

Drug	Route	Usual Dosage		Action		Indications	Contra-indications and Precautions
		Initial	Maintenance	Onset	Peak		
Ouabain	I.V. only	0.5 mg - 0.25 mg q. h. for 1-2 doses	Not for maintenance therapy	5-20 min.	$\frac{1}{2}$ = 1 hr.	Atrial flutter, fibrillation and tachycardia. Nodal tachycardia (severe acute congestive failure)	Dilute to 5 ml, give slowly, monitor heart action with auscultation or ECG; avoid ventricular arrhythmias and previously digitalized patients.
Digitoxin	Oral or I.V.	0.8-1.5 mg in 24 hours	0.05-0.15 mg per day	Same for Oral and I.V. 1 hr. 4 hrs.		As Above	Digitalize patient with severe heart disease with atrial arrhythmias before using quinidine and procaine amide.
Quinidine Hydrochloride	I.M.	0.4-0.6 Gm.	0.2-0.4 Gm. q. 1-2 hr.	10-15 min.	1 - 3 hr.	Atrial tachycardia, fibrillation and flutter; nodal and ventricular tachycardia; ventricular fibrillation.	I.M. is safer. I.V. may be life-saving. Monitor constantly with ECG. Observe minor toxic effects and re-evaluate patient cautiously.
	I.V.	0.6 Gm. in controlled I.V. drip		10-15 min.	$\frac{1}{2}$ - 1 hr.		
Quinidine Sulfate	Oral	0.4 Gm	Repeat q. 1-2 hrs. X 4-10 doses	30 min.	1 - 3 hr.	As above, and premature contractions	Observe patient before each dose; place on prophylactic therapy for period of observation; contra-indicated in Stokes Adams (cardiac asystole)
Procaine Amide	Oral	1 Gm.	0.5 - 1 Gm. q. 3-4 hr.	1 hr	2 hr	Ventricular tachycardia and fibrillation; nodal tachycardia; WPW with atrial tachycardia or fibrillation	Same for oral and I.V. quinidine
	I.M.	0.5 - 1.0 Gm. q. 2-6 h.		$\frac{1}{2}$ -1 hr	1-2 hr		
	I.V.	0.5 - 3.0 Gm. q. 2-6 h.		$\frac{1}{2}$ hr	$\frac{1}{2}$ -1 hr		

testing "sensitivity" is obsolete.

Quinidine Hydrochloride (for parenteral use): The parenteral use of quinidine is necessary in rare but occasional instances. These include atrial fibrillation, flutter, and tachycardia, and ventricular tachycardia and fibrillation complicating myocardial infarction and/or severe cardiac failure. The drug is available in ampules containing 0.18 Gm. (1.5 ml.) and 0.6 Gm. (5 ml.). The initial dose may vary between these. A maintenance dose of 0.18 Gm. intramuscularly every four hours is sufficient to prevent recurrence. Occasionally an intravenous drip containing 0.5 gm. is indicated in an attempt to quickly convert an arrhythmia. In these cases, I prefer to monitor the administration with constant electrocardiographic observations. When this is done, the drug can be interrupted and maintenance therapy started when the arrhythmia is converted. When quinidine hydrochloride is given intramuscularly, it begins its effect in 10 to 15 minutes, reaches its peak effect in one to three hours and is almost entirely excreted in 8 to 24 hours. Intravenously, the drug is effective almost immediately, reaches its peak in one to two hours and is practically dissipated in 3 to 6 hours, although traces are apparent for 18 to 24 hours. Parenteral quinidine is not indicated for attempted conversion of long standing atrial fibrillation; in patients who have a known idiosyncrasy to cinchona or its derivatives; or in patients who have had a toxic reaction to previous minor doses. The patient under 40 years of age with paroxysmal atrial fibrillation, flutter of tachycardia without heart disease need not be pre-digitalized. Pre-digitalization prevents the ventricular rate from approaching the atrial rate existing before conversion (180-400 per minute, depending upon the arrhythmia being treated). Obviously, young patients with serious heart disease or elderly patients "without" heart disease must not be allowed to develop a ventricular rate approaching 300 per minute. The associated diminution of cardiac output and acute myocardial fatigue might quickly be fatal in a variety of ways.

Quinidine Sulfate: Quinidine sulfate orally should be used in most patients except where gastro-intestinal absorption is uncertain. Commonly there are instances

where gastric suction is employed, when the patient is unconscious, or when the patient's condition is extremely critical. The drug is rapidly absorbed, the effect becoming apparent in 30 minutes, reaching therapeutic levels in one hour, persisting for 3 to 6 hours, and declining rapidly from the sixth to the eighteenth hour. The serum concentration studies^{14,18} show an accumulative level when the drug is repeated at two-hour intervals. One hour intervals of the administration shorten the therapy period. Quinidine sulfate is available in 0.2 and 0.3 Gm. tablets and capsules. The recommended dose varies from 0.2 to 0.6 Gm. every hour for 3 to 5 doses or 0.2 to 0.6 Gm. every two hours for 4 to 10 doses.

Quinidine gluconate is likewise available and is satisfactory for intravenous use (0.8 Gm. in a 10 ml. stoppered bottle), but too dilute, in my opinion, for the intramuscular route. About three-fourths of the quinidine is destroyed in the body, and the larger part of the remainder is excreted in the urine.¹⁹

Procaine Amide: Procaine amide (Pro-nestyl) is a compound in which the ester linkage of procaine is replaced by an amide linkage. The pharmacologic actions are similar to those of procaine; however, the amide is more stable in the body and exerts anti-arrhythmic action in doses having little effect on the central nervous system.²⁰ The drug is almost immediately and completely absorbed from the intestinal tract and the peak effect is apparent within two hours.²⁰ With intramuscular injection peak action is reached in one hour.²¹ The drug is dissipated at the rate of 10 to 15 percent per hour. Over half of the drug is excreted unchanged in the urine because plasma esterase (which catalyses the hydrolysis of procaine) does not act upon procaine amide. Procaine amide, like quinidine, lengthens the refractory period and prolongs the conduction rate of both the atria and ventricles and increases the refractory period of the atrio-ventricular propagation. However, quinidine increases the refractory period of the atria and ventricles long before conduction is prolonged, whereas procaine amide always causes deceleration of conduction as soon as it begins to lengthen the refractory period. This last point may explain the superiority of quinidine over the procaine amide in the

treatment of atrial fibrillation and atrial flutter. Both drugs depress excitability but quinidine acts more selectively on the atria while procaine amide is more effective on the ventricles. This fact may account for the better effect of procaine amide on ventricular arrhythmias.¹³ The drug is available in 0.25 Gm. capsules for oral use and in 10 ml. stoppered bottles containing 1 Gm. for parenteral use. Parenterally the drug is given at the rate of 50 to 75 mg. per minute for a total dose of as much as 3 Gm.²² The intramuscular route is safer and 0.5 to 1.0 Gm.²³ is used. Orally, the initial dose of 1 Gm. followed by 0.5 to 1 Gm. every 3 or 4 hours is suggested for most patients but a total daily dose of 10 Gms. may be required to convert an arrhythmia or to prevent recurrences. Ordinarily 3 to 6 Gm. per day is sufficient. If the desired effect has not been attained after 48 hours, the dose should be increased. The toxic effects involve the circulatory, gastro-intestinal, and central

nervous systems. These include ventricular premature contractions, tachycardia and even fibrillation.^{24,28} A 1:1 response to a supraventricular pacemaker is recorded in the treatment of atrial fibrillation and flutter. Cardiac asystole has been reported.^{29,31} The former can be prevented in most instances by pre-digitalization. Atrio-ventricular block with Stokes-Adams syncope is a clear cut contra-indication to the use of procaine amide, just as in the case of quinidine. The blood pressure should be recorded frequently during administration of procaine amide because hypotension may result and vaso-pressor drugs (methoxamine, mephentermine and 1-norepinephrine) may be required to counteract the effect. Some authors have suggested their concurrent use.³² With oral administration of high doses, anorexia, nausea and vomiting may occur. Flushing and a metallic taste may occur with intravenous administration. Fever, chills, drug rash and agranulocytosis have been report-

TABLE 2.

Drugs of Choice in the Arrhythmias

Arrhythmia	Miscellaneous	Quinidine	Digitalis	Procaine Amide
Premature Contractions (a)	X	1	3	2
Atrial and nodal tachycardia (with organic heart disease)	Vagal Stim., etc.	1	2	3
(without organic heart disease)		2	+	1 (or + 3)
Atrial fibrillation and flutter: (with organic heart disease)	S E E B E L O W			
(without organic heart disease)		2	+	1 (or + 3 ?)
W P W with atrial tachycardia		1	2	3
W P W with atrial fibrillation				1
Ventricular Tachycardia (b)		2 (IV)		1 (IV)
Ventricular Fibrillation (b)	defibrillator	2 (IV)		1 (IV)
Complete A-V Heart Block (c)	Treatment rarely needed. Epinephrine 0.1-0.3 ml. subcutaneously or IV drip. Isuprel 5 - 15 mg. Pacemaker (?)			
Stokes - Adams (d)	Atropine sulfate 1-2 mg. Epinephrine 0.1-0.3 ml. intracardiac Pacemaker			

(a) includes atrial, nodal and ventricular origin
(b) requires constant monitoring with ECG
(c) first and second degree A-V heart block need not be treated, and
(d) when cause is ventricular fibrillation, use quinidine; when ventricular standstill, quinidine is contra-indicated.

ed.³³⁻³⁸ Auditory and visual hallucinations and confusion is seen especially in the older patients. When decreased renal or cardiac function is present, the excretion of the unchanged procaine amide is prolonged and initial and maintenance dosage is less. As yet anaphylactic death due to procaine amide has not been reported in the literature. Intravenous barbiturates are specific therapy for anaphylactoid reactions. A history of sensitivity to procaine should serve as a contraindication to the use of procaine amide.

Procaine amide is indicated in ventricular tachycardia and fibrillation, nodal tachycardia and to a lesser degree, in atrial tachycardia, fibrillation and flutter. There is one notable exception to the latter reported recently by Herrmann, et al.³⁹ In patients with Wolff-Parkinson-White⁴⁰ (Bundle of Kent) conduction mechanisms, the electrocardiogram of atrial fibrillation resembles that of ventricular fibrillation and the electrocardiogram of atrial tachycardia resembles that of ventricular tachycardia. But the general condition of the patient is good (a pulse is palpable, blood pressure is present and heart sounds are audible). These respond to the intravenous administration of 0.5 Gm. of procaine amide, given slowly over a period of 15 minutes. In a few instances, a second dose was required. Quinidine had completely failed to convert these arrhythmias.³⁹

Conclusions

Ouabain, a rapid acting digitalis preparation (acts in a few minutes) is suggested in the control or treatment of the rapid atrial and nodal arrhythmias when a delay of 4 to 6 hours might endanger life. Digitoxin is suggested for these arrhythmias when life is not in jeopardy. Digitalis is contraindicated in ventricular tachycardia and fibrillation. In adults, simple mechanical and reflex stimulation may convert paroxysmal atrial tachycardia. In infants, Lanataside-C intravenously may be life saving.

Summary

The merits of quinidine vs. procaine amide have been presented. The advantages, disadvantages and pharmacologic actions have been discussed. Procaine amide is distinctly indicated in atrial tachycardia with

Wolf-Parkinson-White mechanism (pseudo-ventricular tachycardia). This condition should not be confused with true ventricular tachycardia. In atrial fibrillation with Wolff-Parkinson-White mechanism (pseudo-ventricular fibrillation) procaine amide is also the drug of choice. This latter should not be confused with ventricular fibrillation.

Both quinidine and procaine amide are contraindicated in Stokes-Adams attacks when these are due to cardiac asystole and of questionable value when the attacks are due to ventricular tachycardia or fibrillation. Isoprel (isoprel 1-norepinephrine) 15 mg. sublingual is indicated in the treatment of Stokes-Adams attacks with complete atrio-ventricular block.

Nodal tachycardia is extremely rare. Atrial tachycardia will frequently respond to carotid, oculocarotid or vagal stimulation or to other simple maneuvers.

It is wise to become fully familiar with a limited number of carefully chosen drugs rather than continue experimentation with a larger number equally limited in primary action.

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Therapeutic Conference

The PLACEBO

R. W. PAYNE, M.D., Moderator,

STEWART G. WOLF, M.D. and JAMES A. HAGANS, M.D.

Doctor Payne: The subject for discussion today is the placebo. This may seem a strange subject for a therapeutic conference, yet the neatly arranged house of the pharmacologist is considerably haunted by this rather boneless intruder. I must confess that I am not completely sold on this strange device, yet must admit that its prominence in the reputable literature is increasing by leaps and bounds. At least, evidence of certain remarkable properties of the placebo is becoming increasingly difficult to ignore.

The medical years 1935 to 1945 brought remarkable advances in antibiotic therapy. During the next decade emphasis was directed toward the development of the active hormonal therapeutic agents, such as the glucocorticoids, etc. Could it be that the present elucidation of the placebo will constitute Nobel Prize material? If so, I am sure that Doctor Wolf will be a strong candidate. I find myself increasingly aware of the fact that scientific study of the placebo is producing a tremendous impact upon medical therapeutics.

Dr. Stewart Wolf, Chairman of our Department of Medicine, is a pioneer in the study of the placebo and has contributed substantial knowledge toward our understanding of this subject. Dr. Jim Hagans, also a member of the Department of Medicine, is intimately concerned with analysis of the placebo effect in his extensive program of clinical therapeutic evaluation.

Doctor Wolf, I like to begin our discussions on some reminiscent phase of the subject. I wonder how your interest in placebos developed? How does one become interested in such an uninteresting subject? Could you give us a definition of the word "placebo"?

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Doctor Wolf: The reason I got interested in placebos was entirely accidental. We had been studying Tom, the patient with a hole in his stomach, before the war; and then for three and one-half years I was in the war separated from this fruitful experimental subject. Like so many veterans back from the war I had a good deal of anxiety about getting into production again. I elected to try a good many pharmacodynamic agents on Tom's stomach, recording their effects on gastric secretion, motility and on the state of the vessels in the mucosa. Among various agents, I gave him prostigmine several times. He hated prostigmine because it caused his mucosa to become intensely engorged with a marked increase in production of acid, which spilled out on his abdominal wall and burned the mucocutaneous junction. Prostigmine also caused intestinal cramps, frequently followed by diarrhea. Soon I noticed that no matter what agent I gave him, I would get the typical prostigmine-like effect. Even when I introduced just plain tap water into his stomach I noticed a very marked increase

of gastric function with the typical intestinal cramps. Then I made up a large red capsule filled with inert material, introduced this to him with: "Tom, I know you don't enjoy this but your participation in these studies is important because of your unique situation and I'm afraid we will have to go ahead with it," and popped this placebo capsule into his stomach. He had the most violent prostigmine-like response; gastric juice poured forth from his stomach and his abdominal cramps became so intense that we had to terminate the experiment right away so that he could have a sudden bowel movement. This experience gave me respect for the placebo and also, of course, called for a redefinition of the term. Placebo, which comes from the Latin "I will please" is a name applied to inert agents given to people to please them. When placebos are effective they do much more than please the patient. They may also bring about the desired physiologic change which eliminates their symptoms. Undesirable physiologic changes might also be brought about and so it would seem convenient to extend the definition of placebo effect to include unfavorable as well as favorable effects. Thus, the placebo effect is any measurable physiologic change which occurs in response to administration of an agent which can not be attributed to any pharmacodynamic property of that agent. This means, of course, that active pharmacodynamic agents may have placebo effects in addition to their regular pharmacodynamic effects.

Doctor Payne: Doctor Hagans, what do you consider the most effective placebo? I have wondered why liquid placebos are so seldom used. Are therapeutic such as aspirin or vitamins considered good placebos?

Doctor Hagans: Well, that's a tough question for me to try to answer. The placebo could be, as you pointed out, in a liquid form; it could be injectable, or in several forms to be taken orally. I don't know the correct answer to your question, although, in general, judging from the satisfactory responses that one sees in practice from weekly or bi-weekly injections, I would suspect that injection is the most effective means of administering the agent. On the

other hand, orally administered pink liquid phenobarbital, the contents of which are rarely known to the people who take it, seems to work pretty well (to say nothing of Lydia Pinkham's Vegetable Compound and Carter's Little Liver Pills). I don't really know the answer here, nor have I ever seen an objective study reported on that problem. I would guess that the "hypo" placebo would rate highest of all in a general study.

Doctor Wolf: Of course, one would prefer a placebo that the patient couldn't recognize and therefore a liquid would be a disadvantage, wouldn't it? Perhaps that is why capsules are usually the instruments of choice. Just trust people not to open the capsule.

Doctor Payne: Pharmacologists classify placebos as "pure" and "impure". There is some thought that any drug with pharmacologic activity is a relatively poor placebo. It is felt that such an agent is not a true placebo, or at least is "impure" in this regard. Aspirin, in particular, is condemned by the placebo purist. Has that been your experience, Doctor Wolf?

Doctor Wolf: Certainly many investigators complain about that and I think the point you make is an important one. Any pharmacodynamic agent can be used as a placebo as long as one knows what it does.

Doctor Payne: Perhaps the patient should not be misled by any demonstrable effect of the agent. Doctor Hagans, if you were presented with a drug of vague pharmacologic effect, such as a new "tranquilizer," how would you set up a program to evaluate it?

Doctor Hagans: I think one of the essentials in evaluation of the effects of any drug in human beings (particularly if we are dealing with subjective responses rather than any objective measurements) is that we have available to include in our study program a record telling us to what degree other things may influence the responses that we are measuring. The common way to do this is to include a placebo agent which looks identically the same as the active agent that we are testing and supply it to the doctor who is going to carry out the tests under double-

blind conditions. This implies that neither the doctor nor the patient should know which bottle of tablets contains the active medicine and which bottle the placebo agent. The physician then sets about administering these tablets to various test-patients and records the results. This, at least theoretically, and I think practically, reduces any particular bias that the doctor or patient may have concerning that agent. At least (again theoretically) the same degree of bias would be present in the placebo bottle as in the other bottle of medication. Once the results are all in, the physician can measure the responses that occurred in the placebo group and compare them with the responses to the drug under study. Some of the results in such studies are quite amazing in that they are exactly the same. Often the doctor feels, during the course of the experiment, that he is getting a clear-cut drug effect and is quite surprised to learn he obtained the same effect with equal frequency in the placebo group. I have had such experiences on more than one occasion myself, in the testing of agents under the conditions of the placebo-double-blind.

Doctor Payne: I understand that a disconcerting problem in placebo studies is the so-called "placebo reactor." Such individuals, I understand, bear no distinguishing marks. For example, approximately 70 percent of a group of our medical students proved to be placebo reactors on one occasion. Medical students may not be entirely normal but they are usually rather astute observers. Doctor Wolf, how do you weed out the placebo reactor? How do you account for such an individual in controlled placebo studies such as the double-blind procedure?

Doctor Wolf: I think that the placebo reactor is like the motorist. Nearly all of us are motorists at one time or another and one couldn't possibly weed out the motorists in our population. The same would hold true for the placebo reactors. Whether or not one reacts to a placebo depends on many things, including conscious and unconscious associations and the manner in which an agent is given. For example, in a hospital in Massachusetts many of the staff men were reporting very favorable results with

certain of the newer tranquilizing drugs. There were a few staff men on the other hand who were reporting poor results with the same drugs. A colleague simply took tab on all the patients and correlated therapeutic results, with a separate appraisal of the degree of positivity or negativity of the doctor's attitude toward the tranquilizers. He found a one to one correlation. The patients of the enthusiastic doctors did best. This is a rather striking demonstration of how people can be made to be placebo reactors, not because of something intrinsic in them but because of the circumstances under which an agent is given. Although the tranquilizing drugs are widely accepted in the treatment of disturbed psychotic patients, the only double-blind control study that I know about off hand, was reported in the October, 1955 issue of the *Journal of Mental and Nervous Diseases*. The authors were unable to distinguish the results between a placebo group and a group that received Chlorpromazine or reserpine at a dosage level of 350-800 mg. of Chlorpromazine daily and 850 mg. of reserpine daily. To return to the placebo reactor—Doctor Hagans has recently carried out a very ingenious study. I wonder if you would like to have him tell about that?

Doctor Hagans: I think most of the people in this room are aware of this study as many of them drank the ipecac. Essentially what we studied was a series of seven successive tests with antiemetic agents given to people who had nausea and vomiting induced by ipecac. During these seven tests there were times when each of the subjects took the active agents and times when they took placebos. We obtained no differences at all between any of the agents tested and the placebos. No matter how we analyzed the data, and we analyzed them in many different ways, the placebo action in each instance always seemed to be as good as that of the active agents. For practical purposes, then, we had seven placebo tests on the same individual. We analyzed these from the standpoint of searching for the person who would react to the placebo consistently in all seven tests. He would be a "placebo reactor." Presumably the person who would not react to any of the seven tests would be considered a pure "non-reactor." In order to compare

the results we obtained with some chance distribution we then took a coin and flipped it seven times in a row, counting heads as a "reactor" (a positive response to the placebo) and tails as a "non-reactor" (the negative). When we figured the incidence and classified them as heads and tails, or "reactors" consistently and "non-reactors" consistently we then compared the distribution in our experiment to the distribution in the coin test. If one just looked at the two graphs, I am sure that he could not pick out which one represented the therapeutic experiment and which one the coin tossing one. I think this simply establishes, as Doctor Wolf has pointed out, that at some time during the experiment everyone had reacted to the placebo and at some time almost everyone didn't. Further, there was no tendency for one individual to consistently react in a specific manner to a placebo even upon seven successive tests. The attempt, therefore, that has been recommended previously by some authors, namely to separate all people who have a tendency to react to a placebo would, under our circumstances, have led to "weeding-out" a good many subjects, we believe, unjustifiably. The other aspect of that situation could be as follows: suppose we had a person who on the first three tests responded favorably to the placebo. We would then call him a "placebo reactor" on the basis of these three tests. We would anticipate that on the fourth test he would also respond to the placebo. Certainly a group of such people ("placebo reactors") should be more likely to respond than another group of people who have not responded at all on the first three tests. We analyzed the data from that standpoint and didn't find that to be true at all, so when all was said and done, the responses to the placebo that we observed appeared as though they were due to chance. At least, they had a distribution that was not distinguishable from the chance distribution set up by the tossing of a coin.

Doctor Payne: Doctor Wolf's and Doctor Hagans' findings on the placebo reactor are a little disheartening to me. If we are to use placebos in a considered manner it would be most convenient if we could anticipate those individuals most likely to respond to them. I don't think Doctor

Beecher takes quite the same attitude. Though he believes that placebo reactors are essentially normal individuals, it is my impression that he feels that such individuals can be detected in some instances by psychological testing methods. Do you agree, Doctor Wolf?

Doctor Wolf: No, this represents a difference of opinion between Beecher's group and Lasagna in Baltimore, who feels as Beecher does, and our own group.

Doctor Payne: They say you can't fool children. What about placebo studies in children? Are there any such available?

Doctor Wolf: I don't know of any.

Doctor Payne: I suppose that these little individuals would present numerous complications in such a study.

Just recently an ethical placebo preparation has been made available. This is described rather glowingly as a pure placebo of prolonged action. The cost of these handsome capsules has been placed at a par with the usual price of a new drug. This has been done to strengthen the patient's faith in the efficacy of the corn starch. Probably the most pressing indication for such placebos is at the point where one is at a loss to know what to prescribe.

Doctor Wolf, what are the therapeutic indications for placebos? Could you tell us how they should be given and what type of preparation you would recommend? How long should they be given and how should they be discontinued? Might one expect withdrawal symptoms when these medications are discontinued?

Doctor Wolf: Let me start with the contraindications. One should not prescribe an agent as a substitute for coming to grips with the core of the patient's problem. If your patient's illness is dependent on his problems of adaptation to the people around him it behooves the doctor to get to know the patient and to deal with these problems of adaptation. He must not substitute any kind of pharmacodynamic therapy whether he intends to use it as a placebo or not. This is a very serious contraindication to the use of placebos. Of course this is the way in which vitamin B injections are used all over

the country. I hope this is something that the graduates of this school will not do. Now what about indications for the use of the placebo? I can give you one—a patient who came to me several years ago was taking enormous amounts of male hormone. He had been a P-T boat man in the Navy and had always been thought of as being extremely virile and active. When he got out from under the protective wing of the military and lived in the competitive society of New York he didn't feel quite so strong and virile, so he went to a doctor who naturally prescribed male hormones. Male hormones seemed to help so he took more and more of them and finally was taking them both parenterally and buccally in enormous amounts. The doctor who first prescribed the testosterone asked me to try to wean him away from it. Well, I started to wean him by substituting placebos. It took a long time but finally I was successful. This fellow is now an important person in his community. He is now addicted to the placebo. We at least cured the testicular atrophy which he had suffered from taking all that testosterone. We thought it was very important to get him off it.

Any physician may temporarily give placebos to patients in the hope of getting a better grasp of the psychodynamic aspects of their patient's illness. I think it is usually pretty unsafe to explain to the patient that you have been giving him an inert substance when you discontinue the placebo and just let it go at that; as though whatever it was supposed to do is no longer required. With a few patients it is possible to explain exactly what you are trying to do, and indeed, in those individuals it is quite an advantage to explain it to them, but this is a little hazardous. I think, in short, that the administration of placebos should be undertaken for some good reason other than laziness and that they should never be used as a substitute for more definitive therapy.

Doctor Payne: It is reassuring to hear that. Some writers on the subject go to the extreme in maintaining that one should not use placebos for the treatment of relatively minor complaints, but should reserve them for the more serious diseases. I also understand that they should preferably be used

in diseases that are not psychosomatic in origin. I find this all rather confusing. It would seem logical that they might be of value to circumvent the use of agents with adverse side effects; or to satisfy a patient's demand for treatment until adequate diagnostic procedures can be completed.

Doctor Wolf: Another indication of the placebos just occurred to me and I don't know whether this has been looked into very thoroughly. A few years ago Dr. Harrell Dodson and Dr. Howard Bennett studied the morphine requirements of post-operative patients. In some of these patients, instead of the routine order for opiates during the early post-operative period, they ordered sterile saline injections "ad lib." It was learned that the patients who received placebos instead of opiates noted no greater degree of suffering during early post-operative time than those who had received opiates. They had fewer gas pains and the interference of bowel function was much less troublesome than among the opiate group, as one might expect. Most of the patients in the placebo group seemed to value very highly the ready availability of an injection. It was not just the "shot" but the feeling that there was someone down at the end of the hall who would come when called. Beecher also did similar studies on post-operative patients and found essentially the same thing. It appears that much of the suffering and anguish that follows an ordinary routine surgical procedure comes from apprehension and anxiety. This can be alleviated by frequent injections or frequent ministrations of any kind and particularly by the knowledge that if you call for something you can get it. It seems to me that here is a very good place to use the placebo instead of the opiate.

Doctor Payne: I think that Dr. Harold Wolf has described the placebo as a symbol of comfort to the patient.

Doctor Wolf: Yes, I think that was his remark in one of the Cornell Therapeutic Conferences—a symbol of the availability of the doctors to help.

Doctor Payne: Certainly a humane consideration.

Doctor Hagans: Yes. I would like to express my feeling on that too. I don't know whether I am at odds with you two or not

on this point. Many times I have found a student, an intern, or a resident who has described a post-operative patient or a patient with a myocardial infarct, having pain, who is getting morphine and then, all of a sudden, for some reason or another, they decide that maybe the patient doesn't have any pain, and they try a sterile hypo and this works just as well as the morphine. The interpretation which is often put on this is that the patient really isn't having any pain. I would like to point out that this is the place where we have to keep our thinking quite clear. The fact that a sterile hypo did relieve the patient in no way means, at least to the best of our knowledge, that the patient wasn't having any pain or that the pain was of a purely psychogenic origin. As a matter of fact, one situation where the placebo seems to work best is for the relief of pain where it is most severe, and this is an interesting paradox. But the thing is that most analgesics, as well as the placebo, seem to work not at the affector organ where the pain originates, but rather in the conscious interpretation or reaction to the pain that is received. I think it is very important to keep in mind, and not get hostile toward the patient and not feel that "Here is a patient who has been fooling me all the time and hasn't been having any pain." It is well to bear in mind that the patient is much more apt to respond favorably to the placebo if there is a good doctor-patient relationship, than if there is a poor one. When a patient responds favorably to a placebo, it is then, albeit indirectly, quite a compliment to the attending physician. He would do well to receive it and interpret it as such, rather than to accuse the patient of "fooling" him.

Doctor Payne: I think that is a very important consideration. These placebo reactors are not to be condemned, they are not mental defectives, they are not psychopaths, they are not hypochondriacs; usually they are normal people and placebos may give them relief just as effectively as potent analgesics.

Doctor Wolf has been concerned with the toxicology of placebos. I find this most interesting and wonder if he will outline in brief the toxic effects he has encountered using placebos.

Doctor Wolf: This is an interesting point and I suppose it isn't unexpected, because if it is possible to produce bodily changes with placebos it is possible to relieve a physiologic mechanism productive of pain, as Doctor Hagans brought out. It would naturally also be expected that certain undesirable effects might be produced by the administration of a placebo. I think the most vivid experience that we have had with toxic effects of the placebo occurred in an experiment in which the so-called tranquilizing effect of Tolserol[®] was under study. We had a very elaborate double-blind arrangement for the study of objective and subjective evidences of anxiety and tension as affected by Tolserol[®]. We told the patients very little so that the whole procedure might have been somewhat frightening to them. We noticed a good many minor toxic symptoms, drowsiness on the one hand and sleeplessness on the other, anorexia, nausea and itching. These minor toxic effects occurred with precisely the same frequency in the placebo group as with the group who received the Tolserol[®]. Three of the placebo patients developed major toxic reactions. One of these was called dermatitis medicamentosa by the consulting dermatologist. This occurred on both placebo and Tolserol[®]. Another patient had an anaphylactoid reaction during which the blood pressure fell within ten minutes after taking the agent by mouth and there was an associated diarrhea. This reaction also followed the placebo. The third patient developed a giant urticarial reaction with swelling in the lower lip and tongue, following both the placebo and the active agent. I think this lesson is a very important one. When one is testing drugs one can't assume that the occurrence of toxic reactions is due to the pharmacodynamic or toxic properties of that drug. They may be due to other extraneous forces, including placebo effects.

Doctor Payne: Do you ever see the phenomenon of drug reinforcement or reduction in the side-effects of medications by concurrent administration of placebos? For example, can the nausea produced by morphine be prevented with placebos?

Doctor Wolf: I am sure it would work but I have never actually studied it.

Doctor Payne: This certainly would prove

a most complicated experiment. Doctor Hagans, will you tell us how prominent the placebo effect is among the multitude of "happiness pills" that are currently appearing on the drug shelves. I wonder if you would tell us of your experience with the drugs that might appear to be acting largely as placebos among these agents. In practice, how do you ascertain whether the drug you were giving is acting largely as a placebo?

Doctor Hagans: Those are fair questions and I wish I had a fair answer. I believe that it would be wrong to attempt to take the subject of feeling out of the doctor-patient relationships, and out of trying to give the patient the thing that helps and pleases him. The patient is better, and praises the doctor and the medicine for it, and I'm not sure even then that one should try to take these things out. But it is vitally necessary to recognize these phenomena and allow for their measurement. This is the magnitude, I believe, of the problem in trying to ascertain whether a therapeutic agent is working or not. The drugs that I have had the widest experience with have been the anti-hypertensive agents. There is no question that these agents can lower blood pressure sometimes and under some conditions. And there is very little question that certain of them in suitable doses will lower blood pressure rather dramatically most of the time. But upon sustained, chronic administration over a period of months there is considerable question, at least in my mind, as to whether any of the drugs can lead to satisfactory "control" of a person's blood pressure level. There is no question but that a large amount of the symptomatic relief which the patient who takes these drugs experiences is in the realm of placebo effect. This has been documented by double-blind studies on more than one occasion. Reiser, Brust and Ferris have contributed a large amount of understanding in this particular area. Anti-nauseant drugs represent an area that include some contradictory studies. In our studies we have attempted to grade results in terms of the way a clinical investigator, dealing with nausea and vomiting on the ward, would grade them; that is, complete relief (protection) and then partial relief (or marked improvement) in the nausea and vomiting experience. When we added

this all together we found 65 to 75 percent effectiveness of the agents we tested. This was also true for placebo. There are very few placebo controlled reports on drugs intended for use in clinical nausea and vomiting, other than in motion sickness. There are very few of the reports that demonstrate any success rates with the drugs greater than these percentages. I wonder, although we do not have at our finger tips the information to prove this by our own personal experience, if we really have truly effective anti-nauseant and anti-emetic agents, other than for use in very specific circumstances, such as apomorphine intoxication.

Doctor Wolf: I would just like to comment on Doctor Hagans' percentages because I think there is a general point here. If you look over the literature you will find that roughly 2/3 of the patients are moderately or greatly improved and of this group something in the neighborhood of 20 percent greatly improved after almost any procedure be it pharmacodynamic, magical, or psychotherapeutic. This appears to be about the range of placebo action. The reports usually indicate that about a third of the patients are not benefited. This again raises the question "In the cure of disease, in the relief of the patient, what is man's part and what is nature's?"

Doctor Payne: Doctor Wolf, have you encountered any reports of fatalities from placebos?

Doctor Wolf: There has been at least one fatality, Doctor Payne. In the early trials of gamma globulin for poliomyelitis prevention, a fatality occurred within minutes after the injection of the material, which turned out to be a placebo. Now this isn't too surprising since 85 per cent of the persons who die from snake bite don't die from the venom but rather from the effects of the frightening situation. Most instances of drowning are not associated with waterlogging of the lungs but are due to cardiac arrhythmias associated persumably with fright—so we'd expect an occasional fatality from the placebo.

Doctor Payne: Or in giving a placebo instead of active medication in the wrong situation. We appreciate this honest and stimulating discussion and I am sure that we have all gained respect for the placebo.

Case Report

VISCERAL LARVA MIGRANS

WALTER L. HONSKA, JR., M.D.

Introduction

Extreme eosinophilia may be found in many disorders. Allergic diseases, skin diseases, parasitic infestations, infections and diseases of hematopoietic system such as leukemia and Hodgkin's disease may be associated with eosinophilia. Certain disease entities produced by parasites infecting an abnormal host have recently been reported.¹ The larva of dog and cat ascarids of the genus *Toxocara* have been responsible for eosinophilia and granulomatous foci with or without larva in the liver, kidneys, heart, brain and lungs of children.²

Case Presentation

An 18 month old white male was admitted with a history of fever of 3 months' duration. The child was frequently seen eating dirt. Physical examination revealed an alert, vigorous white male in no distress. There were numerous firm anterior cervical nodes. The liver was 7 cms. below the right costal margin. The spleen was felt 3 cm. below the left costal margin. The remainder of the physical examination was unremarkable.

X-ray films of the heart and lungs were normal. The hemoglobin was 7.9 gms.; white blood cell count 26,600 with 10 neutrophils, 14 lymphocytes, 1 monocyte, 2 basophils and 73 eosinophils. Stools for ova and parasites were negative. The total serum protein was 9.9 gms. with albumin 5.5 gms. and globulin 4.4 gms. Cephalin flocculation at 24 hours was 1+. Bone marrow was normal cellular and no megakaryocytes were seen. Differential count revealed metamyelocytes 7; adult neutrophils 4; myelocytes 5; promyelocytes 3; myeloblasts 1; normoblast 36; eosinophils 30. Differential count of eosinophils revealed adult eosinophils 16; eosinophilic metamyelocytes 8; eosinophilic myelo-

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cytes 4; and eosinophilic promyelocytes 2. Laparotomy was done and exploration revealed many white nodules varying from 2 mm. to 10 mm. over the surface of the liver. Biopsy of liver was reported as: "Hepatitis, subacute (visceral larva migrans)" Fig. 1. The patient became asymptomatic on conservative treatment and was discharged from hospital care.

Discussion

Visceral larva migrans is usually found in children from 18 months to 4 years. There is a history of close contact with kittens or puppies and the child is usually known to eat dirt. Symptoms begin with loss of appetite, failure to gain weight, temperature elevation and cough. Urticaria and muscle pain is occasionally seen. Hepatomegaly is always present and splenomegaly may be found. Convulsions have been reported.² Laboratory findings reveal eosinophilia from 20-80%. Hyperglobulinemia is frequently seen and stools are negative for ova, parasites and blood.

The disease is suspected in a child with appropriate animal contacts, hepatomegaly and eosinophilia. The diagnosis may be confirmed by finding characteristic granuloma on a liver biopsy.

The disease is usually self-limiting but eosinophilia may persist for months to many years. Treatment is symptomatic and attacking the larva with drugs has not been

satisfactory. Prevention is best obtained by frequent deworming of pets and not allowing children to play with young animals. Adult animals are usually immune to the *Toxocara* infection.³

Beaver was first to prove experimentally that the larva of nematodes naturally adapted to hosts other than man could remain immature in the human host for a long time and cause symptoms.¹ Brill in 1953 described autopsy findings in a 2 year old boy revealing granulomatous foci with eosinophilic infiltration in the liver, kidney, heart and lungs.⁴ These allergic granuloma consist of disintegrating eosinophilic leukocytes and altered "fibrinoid" connective tissue. The adjacent tissue is infiltrated with many eosinophils, many giant cells may be present and occasionally the larva may be seen.

The function of the eosinophilic leukocyte remains obscure. Well known for its presence in allergic response, their function in hypersensitivity is not understood. The cells increase in number following injection of foreign protein and during the decomposition of body protein. Therefore eosinophils may have some part to play in the disintegration and removal of protein.⁵ A relationship with the adrenal gland exists since ACTH and Cortison depress the eosinophils.

Any abnormal parasite to man would be capable of causing this disorder; however, *Toxocara canis* is most frequently incriminated due to the close relationship of man with kittens and puppies.

The normal hosts of *Toxocara canis* are dogs and cats. The eggs pass in excreta and contaminate the soil. In moist soil the eggs are ingested by dogs and cats and the larva hatch in the small intestine and migrate to the liver or lungs through the blood or lymph channels. They then reach the small intestine and mature to adults.³ In man the life cycle is different since man is an abnormal host. In the abnormal host the larva hatch from the embryonated eggs and penetrate the mucosa of the small intestine to reach the liver, lungs or other organs and may remain alive for an undetermined amount of time. This may explain the persistence of the hepatomegaly and eosinophilis since in an ab-

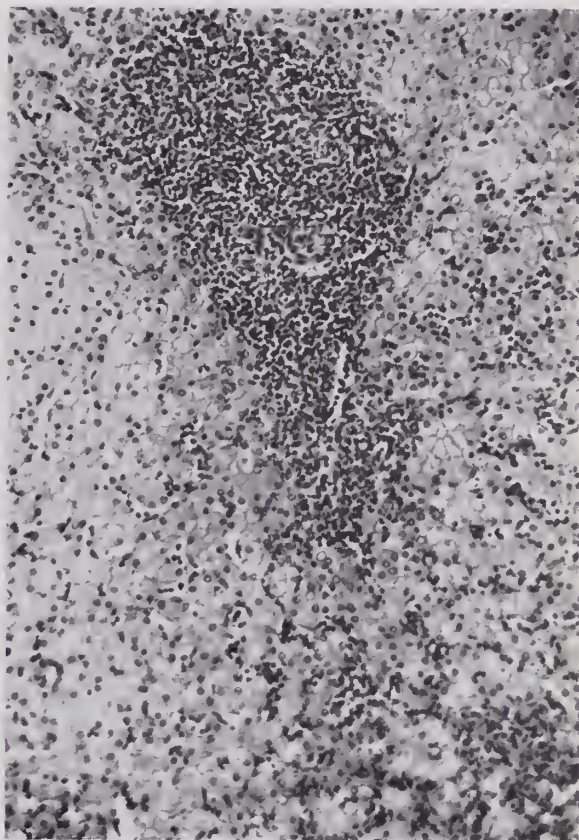


Figure 1. Section of liver showing a dense focal and diffuse infiltration of inflammatory cells, a large portion of which are eosinophils. A granuloma composed of foreign body giant cells is present.

normal host they are unable to mature to adults.

Summary

A case of visceral larva migrans is described. Man's best friend may be the dog; but the puppy is not necessarily a child's best friend.

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PRESIDENT'S LETTER



August in Oklahoma usually marks a letdown in all activities. The fairs and summer celebrations are mostly over, the crops are laid by, and those people who can are gone on vacation—those who can't are moving slowly and taking the weather in their stride.

It can also be a good time to make plans for the forthcoming autumn. It is to that thought I would like to call your attention. I should like to make an especial appeal to you in making your calendar of meetings for the Fall and Winter that you definitely set dates to attend your County Medical Society. Your County Medical Society is your organization. It can be most valuable to each and everyone of the doctors in Oklahoma. It is the organization where you, on a democratic basis, can express your views and ideas. It is the organization that you should work through in solving problems of community health. It is the forum you should avail yourself of in socio-economic policies in regulating some of medicine's every day problems. Membership in your county society is your immediate tie to organized medicine, Local, upward to District, State and National levels. Your participation is most vital in assisting your elected representatives in establishing policies and solving some of the complex problems that are developing in our country today. You will also find that as you meet and associate with your fellow practitioners you will become more tolerant and considerate, and some of the peculiarities of "the other fellow" will disappear upon your better acquaintance with him.

John Fleck Burton, M.D.
President



"...results for trichomoniasis have been best and more consistent¹ using Floraquin..."

Floraquin® eliminates trichomonal and mycotic infection; restores normal vaginal acidity

Leukorrhea is by far the most frequent symptom of vaginitis; trichomonads and monilia are the most common causes. Many authors have reported² trichomonal protozoa in the vagina of 25 per cent of obstetric and gynecologic patients. Increased use of broad spectrum antibiotics has resulted in a sharp rise in the incidence of monilial infections.

Floraquin effectively eradicates both trichomonal and monilial vaginal infections through the action of its Diodoquin® content. Floraquin also furnishes boric acid and sugar to restore the normal vaginal acidity which inhibits patho-

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Pitt¹ recommends vaginal insufflation of Floraquin powder daily for three to five days, followed by acid douches and the daily insertion of Floraquin vaginal tablets throughout one or two menstrual cycles. G. D. Searle & Co., Chicago 80, Illinois. Research in the Service of Medicine.

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SEARLE

Association Activities

Asiatic Influenza Campaign Announced

Surgeon General Leroy E. Burney announced recently that first supplies of a vaccine against Asian influenza are expected to become available to the public during September.

Doctor Burney said the six manufacturers licensed to produce influenza vaccine have set production goal of at least 60 million cc. (doses) by February 1. This involves hiring additional personnel and operating two or three shifts, seven days a week.

The Public Health Service will undertake a vigorous campaign to urge maximum public use of the vaccine just as rapidly as supplies become available. The American Medical Association and the State and Territorial Health Officers will join in this effort.

Doctor Burney said he had asked the manufacturers to produce the vaccine as rapidly as possible. They have reported that they expect to have about 8 million cc. available by mid-September, including about 4 million cc. ordered by the military.

Doctor Burney noted it is quite possible, if not probable, that even with maximum use of the vaccine this country may have serious influenza epidemics in the fall and winter.

"There will not be enough time, of course, to produce and administer sufficient vaccine to immunize a majority of the population before the influenza season," he said. "But the vaccine is the only known preventive and we want to make the best use of it we can."

The Public Health Service, the American Medical Association, and the State and Territorial Health Officers are planning a co-operative public information and education campaign on the nature of the disease and steps to be taken in the event influenza strikes.

The American Medical Association, working closely with the Public Health Service,

has developed a stand-by plan for the best use of available health and medical manpower in time of an influenza emergency.

Asian influenza is caused by a new strain of influenza virus which caused widespread epidemics affecting millions of persons in the Far East last spring. The new vaccine is a monovalent or single strain type designed specifically to combat this Asian strain.

Because this virus is a new strain, Doctor Burney said, people have built no natural immunity to it. Thus it presents a special hazard. "We cannot be sure whether or when an epidemic may occur," Doctor Burney said, "but we should make all reasonable preparations."

There have been local outbreaks in the United States this summer, which normally is a season of low influenza incidence. Several thousand cases have been reported to date to the Public Health Service. Because of the nature of the disease—its swift onset and short duration—precise, up-to-the-minute reports on incidence are difficult to obtain, Doctor Burney said.

Most areas of the country have probably been exposed to the virus by now and past experience suggests that the disease may suddenly begin to spread quite rapidly sometime in the fall or up through late winter, Doctor Burney said.

Doctor Burney pointed out that if epidemics should occur they could spread from San Francisco to Boston in a period as short as perhaps four weeks.

Cases of Asian influenza so far have been marked by temperatures of 102 to 104 degrees, headache, sore throat, cough and muscle aches. The fever lasts three to five days, followed by weakness for several more days. The attack rate in the Far East was approximately 20 percent with a death rate of about two-tenths of 1 percent.

Assuming an attack rate of 10 to 20 percent in this country, this would mean that in a city of one million persons, there could be 100,000 to 200,000 cases.

THIS MONTH'S COVER

Jess D. Herrmann, M.D., F.A.C.S., whose picture is on our August cover, was elected President-Elect for 1957-58 of the American Academy of Neurological Surgery at the Annual Meeting held in November, 1956, at Camelback Inn, Phoenix, Arizona. Doctor Herrmann will be installed as president in November, 1957, at the annual meeting to be held at Sea Island, Georgia.

Doctor Herrmann was born in 1907 in Denison, Texas; he received his M.D. degree from the University of Oklahoma School of Medicine in 1931. Doctor Herrmann was certified in his specialty, Neurological Surgery, in 1940.

In addition to his membership in the American Academy of Neurological Surgery, Doctor Herrmann is a member of the Harvey Cushing Society, the American Medical Association, the Oklahoma State Medical Association, the Oklahoma County Medical Society. He is a Fellow, American College of Surgeons and a member of the Oklahoma City Academy of Medicine, the Doctors Dinner Club and Doctor's Luncheon Club. He also holds membership in the Alpha Omega Alpha honorary medical fraternity.

The Service will continue to keep the public and the medical and health professions informed on nationwide developments in the influenza picture and on the supply, distribution and use of vaccine.

So far, Asian influenza cases in this country have been confined to relatively small groups, in contrast with the Far East experience in which epidemics spread rapidly throughout entire populations. States reporting some incidence of influenza are: California, Utah, Washington, Iowa, Kentucky, Louisiana, Pennsylvania, Rhode Island, New Mexico, Illinois, Minnesota and Connecticut.

The licensed influenza vaccine manufacturers are: Eli Lilly and Company, Indianapolis, Indiana; Lederle Laboratories, New York, New York; Merck, Sharp and Dohme, Inc., Philadelphia, Pennsylvania; National Drug Company, Philadelphia, Pennsylvania; Parke-Davis and Co., Detroit, Michigan; and Pitman-Moore Company, Indianapolis, Indiana.

Past experience has indicated that a single injection of the vaccine will be about 70 percent effective. Protection develops in 10 to 14 days and lasts approximately one year.

The precise cost of the vaccine to the individual has not been determined. In bulk military orders the cost was 20 to 40 cents per cc. Retail prices, of course, may be somewhat higher. This price also does not include the cost of administering the vaccine.

As supplies become available to the public, the Public Health Service will recommend that particular consideration be given to the vaccination of those whose services are imperative for the care of the sick and those needed to maintain other essential functions.

The State and Territorial Health Officers and the American Medical Association have jointly assured the Surgeon General that community resources, both public and private, will be mobilized to provide vaccinations for persons who are unable to pay for such protection.

Doctor Burney said the Public Health Service has been in touch with the manufacturers of antibiotics, such as penicillin, and has recommended that they increase their supplies for the use in fighting secondary infections arising from a possible epidemic. The antibiotics can be used effectively to combat pneumonia or other diseases which may strike as an aftermath of influenza, although they have no value in fighting the influenza itself.

Early in the Far East epidemic the Asian influenza virus was isolated by U.S. Army medical teams and shipped to this country for analysis. On May 22, the Public Health Service sent prototype strains to licensed influenza vaccine manufacturers and work was begun immediately on the development of a vaccine against the new strain.


The Public Health Service continues to keep its epidemic intelligence services focused on influenza developments in this country and throughout the world, with particular attention to any indication of changing patterns in the severity or incidence of the disease. Clinical agents needed for diagnosis of Asian influenza are being produced and distributed, and Public Health Service laboratories are investigating acute respiratory diseases. In addition, the Service is testing and evaluating the vaccine.

2=8



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CONVENIENCE—the low maintenance dosage of 1 Gm. (2 tablets) per day for the average adult offers optimal convenience and acceptance to patients.

TABLETS: Each tablet contains 0.5 Gm. (7½ grains) of sulfamethoxypyridazine. Bottles of 24 and 100.

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(1) Boger, W. P.; Strickland, C. S. and Gylfe, J. M.: *Antibiot. Med. & Clin. Ther.* 3:378 (Nov.) 1956.

*Reg. U.S. Pat. Off.

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Health Insurance For Federal Employees

There has been much speculation within the medical profession as to the manner in which federal employees might be covered for medical and hospital care. The following is a synopsis of the provisions of Senate Bill No. 2339 introduced by Senators Johnston of South Carolina and Carlson of Kansas.

This bill, which has the approval of the Administration, would authorize a contributory group health insurance program for federal civilian employees and their dependents (Federal Government to pay not more than one-third of the premium costs). Employees would select basic insurance coverage of their choice, but such plans must meet minimum standards. The Federal Government would contract for the purchase of catastrophic or major medical coverage. Employees would be required to take both basic and major coverage; they could not elect to take one or the other. The employee's contribution would be deducted from his pay.

It will be recalled the last year the Administration offered to furnish at no cost to employees major medical coverage with benefits starting after the employee paid the first several hundred dollars of expense. American Hospital Association and several federal employee unions voiced strong opposition to any plan which would not include basic coverage. This bill emerged as a compromise containing basic and major coverage, as approved by AHA in another proposal H.R. 7034. Some federal employee unions believe that the Federal Government should pay 50 percent of the total premium cost. The Administration's previous bill offering major medical insurance was proposed on the basis that employees earning \$4,500 average annual wages would not need basic coverage and could afford the first several hundred dollars of medical expense. The Administration also contended that sixty or more percent of all civilian employees were already covered by basic health insurance.

The Civil Service Commission estimates the health program would cover approxi-

Synopsis of Veterans' Benefits Available

If you are interested in a brief resumé of the total scope of veterans' benefits, a summary has been printed at the request of the House Committee on Veterans' Affairs. The title is "Synopsis of Benefits Available to Veterans and Their Dependents, March 1, 1957," and requests should be addressed to Olin E. Teague, Chairman, Committee on Veterans' Affairs, House of Representatives, Washington, D.C.

The "Synopsis" contains, in very brief form a check-list showing what benefits are available to veterans of our four most recent wars, compensation and pensions rates, and brief description of educational, medical, loan, insurance, unemployment compensation and mustering-out payment programs for veterans. It is folded into a handy pocket-size, and makes a useful ready reference guide.

mately 1.8 million civilian federal workers. Another 2.7 million would be covered as dependents (60 percent of federal employees have dependents). The Commission estimates that the maximum cost to the Federal Government of participating in this program would be \$64.5 million annually, \$51.4 million of which would be for its contribution to basic health insurance and \$13.1 million for its share of major medical coverage. The maximum total program cost (government plus employee contributions) would run approximately \$200 million per year. The maximum federal contributions per capita would be \$39.00 annually for an employee and his dependents and \$19.50 annually for such an employee for major medical coverage (a total of \$58.50 annually). The Commission estimates that the average cost per employee, counting those with dependents and those without, would run about \$35.75 per year.

AFL-CIO To Fight Medical Society Actions

A firm stand against the actions of medical societies who fail to go along with union labor medical programs has been agreed upon by the AFL-CIO committee on social security according to the "Summer Newsletter" recently issued by the Association of Labor Health Administrators. The ALHA is a group of medical directors, lay administrators, and other representatives of union health center plans.

The publication calls for action in opposing the "attack and harassment of component medical societies against union plans, particularly in the states of Pennsylvania, Illinois and Colorado." It states that at a meeting on May 15 in Washington, D.C. "at the merged headquarters," the AFL-CIO executive committee approved funds to encourage and promote the work of the ALHA in providing "technical aid to the trade union groups in development of better health service programs for the benefit of workers and their families." The letter also stated that the association "will stand ready to bring experienced technical and legal counsel on request to the defense of the victims of any effort on the part of medical power groups to destroy programs which endeavor to improve the quality and scope of prepaid health services available to working people and their families." The work will be carried out in cooperation with AFL-CIO through its department of social security.

A.U.A. Offers Urology Award

The American Urological Association offers an annual award of \$1000 (first prize of \$500, second prize \$300 and third prize \$200) for essays on the result of some clinical or laboratory research in Urology. Competition shall be limited to urologists who have been graduated not more than ten years, and to hospital internes and residents doing research work in Urology.

The first prize essay will appear on the

Cancer Society Elects Officers

Four officers were elected by the Board of Directors of the Oklahoma Division, American Cancer Society, at its mid-year meeting on June 15, 1957.

The officers who will serve two-year terms beginning September are Fred Boston, Enid automobile dealer, President; Mrs. E. Lee Ozbirn of Oklahoma City, Vice-President; William E. Eastland, M.D., Oklahoma City, Secretary; and W. Howard Patten, Norman banker, Treasurer.

The Executive Committee of the Board of Directors, which conducts the work of the Oklahoma Division between semi-annual meetings of the Board, names its own chairman, a physician, at its first meeting in September. The incumbent chairman is Austin H. Bell, M.D., Oklahoma City.

Other Oklahoma physicians who serve as a majority of the twenty-member Executive Committee and who were re-elected by the Board of Directors are: W. Pat Fite, Sr., Muskogee; J. W. Kelso, Oklahoma City; E. S. Lain, Oklahoma City; Ray H. Lindsey, Pauls Valley; John E. McDonald, Tulsa; Joe M. Parker, Oklahoma City; Ira O. Pollock, Oklahoma City; and Gregory E. Stanbro, Oklahoma City.

Members of the Oklahoma State Medical Association serve as chairmen of most of the American Cancer Society Division's standing Committees. These chairmen include Doctors Eastland, Parker, Lindsey, Fite, and Pollock and Harrell C. Dodson of Oklahoma City.

program of the forthcoming meeting of the American Urological Association, to be held at the Roosevelt Hotel, New Orleans, Louisiana, April 28—May 1, 1958.

For full particulars write the Executive Secretary, William P. Didusch, 1120 North Charles Street, Baltimore, Maryland. Essays must be in his hands before December 1, 1957.



Have You Heard?

W. E. BOSWELL, M.D., Leedey, loaned a part of his interesting collection of saddles, guns and ammunition to be placed on public display in a downtown building in Leedey. The collection represents a part of a collection which has been gathered over a period of about twenty years.

A. H. HATHAWAY, M.D., of Mountain View retired recently from the active practice of medicine after serving the medical profession for 65 years. Doctor Hathaway has made his home in Mountain View since 1908.

PAUL HEERWAGEN, M.D., has retired from active practice at Collinsville to start his residency in general surgery at Hillcrest Medical Center in Tulsa.

A. H. ELLIS, M.D., who came to Pittsburg County in 1902, was honored by the town of Kiowa recently. Highlighting the celebration, which has become an annual event, was a barbeque to which all the physicians in the county were invited to be guests.

L. H. CHARNEY, M. D., Oklahoma City, received his certificate of Fellowship in the American College of Chest Physicians at the largest Annual Meeting in the history of the College. The meeting held in New York City registered 1884 physicians.

WILLIAM BEST THOMPSON, M.D., Oklahoma City physician and president of the Oklahoma Heart Association, spoke at the July meeting of the Maysville Rotary Club.

MELVIN ARTHURS, M.D., of Hinton, is being treated for bruises and internal injuries he

Open House Marks Completion of Clinic

An open house held March 16 celebrated the completion of the Ponca City Urological Clinic, pictured above, owned by Jack Alexander, M.D.

The structure is a modification of a former residence. A unique feature is that the main entrance is located at the rear of the building for the convenience of patients. The large parking lot is at the rear of the building.

Containing 1,400 square feet of floor space, the clinic has five rooms and is air conditioned. Included in the building are a waiting room and receptionist area, Doctor Alexander's private office, and x-ray room, treatment room and laboratory and bath.

Doctor Alexander, a native of Dallas, Texas, has been in Ponca City since 1953.

received in a three-car collision occurring west of El Reno during the latter part of July.

J. RAYMOND STACY, M.D., of Oklahoma City was guest speaker at a clinical conference at the McAlester Clinic in May. Doctor Stacy spoke to the group of doctors on the rehabilitation of the injured.

C. S. HUNTINGTON, M.D., was guest speaker at the regular meeting of the Washington-Nowata County Medical Assistants Society held recently. Doctor Huntington's topic was "Hypertension."

M. L. WHITNEY, M.D., and C. A. CASHMAN, M.D., have opened a clinic in Okemah.

Auxiliary's Report of A.M.A. Annual Meeting

Attending the National American Medical Association Convention in New York City, June 2-7, was an inspiring and instructive post graduate course for me as well as the doctors.

I was pleased to give the Oklahoma report. Since we had just two minutes for each report, I choose one of our best projects, the "Future Nurses' Field Day" sponsored by Mrs. Clifford Bassett of Cushing. It was well received and several asked me for details after the meeting.

Our theme for the year "Health is a Joint Endeavor" was chosen by our National President Mrs. Paul Craig. It was Mrs. Craig's hope that the Woman's Auxiliary will extend homemaking in matters of health into community life, just as they practice it for their families.

Emphasis was also given to our "Handsome Investment"—our husbands. He and the family should have regular physical examinations. We usually take care of our children but neglect ourselves. Have you had a check-up recently? If not, why not make a date for one now?

Special roundtable discussions gave all the members an opportunity to pool experiences in working on legislation, public relations, organization, safety, mental health, civil defense and promotions of the various other projects that we study. We were asked especially to stress legislation and what part we could play in it. We feel that the doctor wants what is best for the patient. We hope to inform ourselves and help educate the public, try to meet our legislators and politicians and get them to give us their ideas and let them hear ours.

I liked the Princeton project discussion "How to Promote Capitalism." In my opinion, it is time someone did. We all say we believe in free enterprise—isn't it the same thing?

I am certain that if the doctors could be present at any of the Auxiliary meetings, they would insist that their wives be active members. Bring your wife to the next National Meeting and suggest that she come as a Delegate. I can promise you that her work

Small Business Loans to Health Facilities Near \$3 Million Mark

In connection with the loan activities of Small Business Administration, the Senate Banking Committee recently favorably reported a bill to extend the agency another year beyond this July 31. It also would increase its loan authority by another \$75 million bringing the loan fund to \$305 million. Dr. David Allman, President of the American Medical Association, suggested to the SBA last fall that if it were going to make loans to group practice physicians, it should also include solo practitioners.

The SBA, reporting its loan activities in the health field, estimated that it had made 34 loans totalling \$2,976,550 for construction, expansion or equipping health facilities. Loans were made to proprietary hospitals, nursing homes, medical and dental laboratories and one combined medical-surgical-dental clinic. Money is loaned either directly to the borrower or in participation with a bank. The total covers the period between last October and July 1 of this year.

Several applications are pending in regional offices for loans direct to physicians. They and other professional people are now eligible for SBA loans. The prospective borrowers seek funds for construction, expansion or improvement of offices, and for purchase of office equipment.

SBA decided last fall to enter the medical field and to offer loans to proprietary facilities, including group practice clinics. The American Medical Association then suggested that if loans were to be made in this field, they also should be available to doctors in solo practice. SBA went ahead with loans to hospitals and nursing homes, but, not certain it had enough funds to offer loans to professional persons, SBA delayed until recently on individual loans. Details may be obtained at regional offices in Boston, New York, Philadelphia, Richmond, Atlanta, Cleveland, Detroit, Chicago, Minneapolis, Kansas City, Dallas, Denver, Los Angeles, San Francisco and Seattle.

in Auxiliary will be of benefit to you and your profession.

—Mrs. John Powers Wolff, President
Oklahoma State Medical Auxiliary



MALCOM E. PHELPS, M.D., El Reno, presents an honorary citizenship to Oklahoma to Secretary of Defense Charles Wilson and Mrs. Wilson. The presentation was made at Ft. McNair in Washington, D.C., when Doctor Phelps attended a national Medicare Committee meeting of which committee he is a member. Doctor Phelps also presented a certificate of Honorary Citizenship to Assistant Secretary of Defense Berry.

Twenty-Seventh Annual Fall Conference of Oklahoma City Clinical Society Scheduled for October 28, 1957 at Biltmore Hotel

The Oklahoma City Clinical Society will open its twenty-seventh annual three day conference at the Biltmore Hotel on October 28, 1957.

An outstanding program of postgraduate teaching has been arranged. This includes lectures and discussion by fifteen distinguished guest speakers selected from various medical and teaching centers throughout the nation. In addition to the general assemblies there will be specialty lectures, a clinical pathologic conference, and daily luncheon roundtable question and answer sessions.

The entertainment will include a banquet on Monday evening at which time the Okla-

homa County Medical Society will be host to the guest lecturers and out-of-town doctors. Kenneth McFarland, Ph.D., of Topeka, Kansas, nationally known lecturer and entertainer will be the principal speaker at this banquet. On Tuesday evening, there will be a social hour followed by nine specialty group dinners, and on Wednesday evening, to climax the three day conference, the annual dinner-dance sponsored by the Oklahoma City Chamber of Commerce will be held.

The Conference has been approved for credit under category I by the American

(Continued on Page 408)

A.M.A. Announces Two Changes In Administrative Setup

The American Medical Association recently announced two important changes in its administrative setup.

The Board of Trustees elevated Dr. George F. Lull of Chicago, who has been secretary-general manager of the Association for 11 years, to the newly-created position of assistant to the president of the A.M.A. He will continue serving as secretary, which is an elective office.

At the same time, the Board announced the appointment of Dr. J. F. L. Blasingame of Wharton, Texas, to the position of general manager of the American Medical Association. He will take over his new duties on January 1, 1958.

Doctor Blasingame, who is 50, has been active in medical affairs, both at the state and national level, for many years. When the A.M.A. House of Delegates elected him as a member of the Board of Trustees in 1949 he was one of the youngest physicians ever chosen. Since then, he has held many important A.M.A. committee appointments.

He served as president of the Texas State Medical Association in 1955.

Teaching and medical education have always been close to his heart. After graduating from the University of Texas Medical School at Galveston in 1928, he spent three years as a teacher on the medical school staff. Ever since then he has maintained a teaching connection at the University of Texas.

Dr. Edwin S. Hamilton, Kankakee, Illinois, chairman of the A.M.A. Board of Trustees, said that the "164,000 members of the American Medical Association are fortunate in obtaining the services of Doctor Blasingame. He is young, highly experienced, and he is making the change at a great sacrifice to himself."

Doctor Hamilton, in announcing the appointment, said that "Doctor Blasingame is dedicated to the principles of good medical care for all of the American people. He possesses all the essentials of leadership,

plus knowledge, imagination and sound thinking. His work on behalf of medicine through the years has shown that he has the courage and initiative to shoulder responsibility."

Dr. Lull to Assist President

In his new job, Doctor Lull will relieve the president of the Association of many of the burdens of this office, which have become especially heavy in the last few years.

Doctor Hamilton said that "Doctor Lull will serve as spokesman, trouble-shooter, listening post, information center and as an ambassador of the medical profession in cities and towns throughout the country. His experience is invaluable, and it will be applied in solving medical problems at the state and local level, as well as nationally."

Doctor Lull, who is 70, joined the A.M.A. staff after serving 34 years in the Army. He entered the Army in 1912 as first lieutenant, emerging as major general of the Army Medical Corps. His last position before retirement was deputy surgeon general of the Army.

Doctor Lull received many honors in connection with his Army service during both World Wars, including the Distinguished Service Medal. In 1951, the Cuban government gave him its highest honor: the Order of Carlos Findlay for his humanitarian work in the field of medicine.

Dr. Blasingame to Move to Chicago

In discussing his new post, Doctor Blasingame said that he will leave his private practice which he has carried on in the same location for 20 years, and will move his family to Chicago, where the A.M.A. headquarters office is located, as soon as possible.

Doctor Blasingame has five children—three daughters, 22, 20 and 13, and two sons, 17 and 10.

His 20-year-old daughter, Betty, will soon enter the University of Texas Medical School; his 17-year-old son, John Chester, is a pre-medical student at the University of Texas in Austin.

Doctor Blasingame has long been active

in civic affairs not only in his home town, but throughout Texas.

He is president of the Blue Cross-Blue Shield Plans of Texas; he is chairman of the Board of Trustees of Wharton County Junior College, and he is also chairman of the medical advisory board of Sears, Roebuck Foundation, which encourages young doctors to create new medical facilities where they are needed.

Doctor Blasingame's many activities took him away from home 128 days last year, and he traveled more than 60,000 miles, mostly by air.

Physicians who know him will say that he possesses a preciseness of manner and a diplomatic polish that compliment each other in both his role as a practicing physician and as a spokesman for his colleagues in state, national and international groups. He has represented the A.M.A. at several world conferences of the World Medical Association abroad.

Oklahoma City Clinical 27th Annual Conference

(Continued from Page 406)

Academy of General Practice. Registration fee for Association Members is \$20.00 which includes all features of the meeting.

The Clinical Society officers are: Herman Fagin, M.D., President; Charles Hugh Wilson, M.D., Director of Clinics; Ralph A. Smith, M.D., Vice-President; Vernon D. Cushing, M.D., Secretary; and Thomas C. Points, M.D., Treasurer.

A cordial invitation is extended to all physicians who are members of their County Medical Societies to attend this meeting from October 28th through October 30th.

Guest speakers scheduled to appear on the program are:

Harry E. Bacon, M.D., Philadelphia, Pa. Professor and Head, Dept. of Rectal and Colonic Surgery, Temple University; David M. Posworth, M.D., Professor and Director

Orthopedic Surgery New York Polyclinic Graduate Medical School and Hospital, New York City; Carlton B. Chapman, M.D., University of Texas Southwestern Medical School, Professor of Medicine, University of Texas Southwestern Medical School, Dallas, Tex.; Frank C. Coleman, M.D., Ass't. Clinical Professor, Dept. of Pathology, University of Nebraska College of Medicine, Omaha, Nebraska; Edmond L. Cooper, M.D., Instructor in Ophthalmology, Wayne University College of Medicine, Detroit, Mich.; James L. Dennis, M.D., Medical Director of Children's Hospital of the East Bay, Oakland, Calif.; James E. Eckenhoff, M.D., Prof. of Anesthesiology, University of Pennsylvania School of Medicine, Philadelphia, Pa.; Isadore Lampe, M.D., Prof. of Radiology, University of Michigan Medical School, Ann Arbor, Mich.; Milton L. McCall, M.D., Professor and Head, Dept. of Ob & Gyn., Louisiana State University School of Medicine, New Orleans, La.; Edmund R. Novak, M.D., Instructor in Gynecology at Johns Hopkins Hospital, Baltimore, Maryland; Rees B. Rees, M.D., Assoc. Clinical Professor and Chairman of the Sub-Department of Dermatology, University of California School of Medicine, San Francisco, Calif.; Harry W. Southwick, M.D., Assoc. Professor of Surgery, University of Illinois College of Medicine, Chicago, Ill.; Homer Swanson, M.D., Assoc. Professor in (Neurological) Surgery, Emory University Medical School, Atlanta, Ga.; Theodore E. Walsh, M.D., Professor and Head, Dept. of Otolaryngology, Washington University School of Medicine, St. Louis, Mo.; Austin S. Weisberger, M.D., Assoc. Professor of Medicine, Western Reserve University School of Medicine, Cleveland; Kenneth McFarland, Ph.D., Nationally Known Lecturer and Entertainer, Educational Consultant and Lecturer for General Motors Corp. and Educational Consultant for American Trucking Associations, Inc.

For further information write executive secretary, 503 Medical Arts Bldg., Oklahoma City.

Disability Income Available Under NSLI

Four out of five doctors do not have disability income on their National Service Life Insurance

A recent survey of close to 100 members of the Oklahoma State Medical Association disclosed the fact that close to four out of five doctors who own National Service Life Insurance of the participating type had not realized that a non-cancellable disability income provision can be added to such insurance, subject to a medical examination.

In addition to waiver of premium in the event of and permanent disability occurring prior to age 60, either as a result of disease or injury and where such disability is continuous for a period of six or more consecutive months, \$5.00 per month for each \$1,000 of insurance is provided under the disability provision. This income would be payable as long as disability continued even beyond age 60, and is not deducted from the face amount of the contract.

At age 35 on the Five Year Level Term contract, the annual premium for the disability coverage on \$10,000 contract is only \$14.20 per year, which would provide in addition to waiver of premiums in the event of total disability a monthly income of \$50.00 per month. At the same age, the rate applicable to Ordinary Life or Endowment at the age 60 or 65 contract for \$10,000 would be \$35.60. These rates are substantially below the cost of comparable coverage with a private company, so where a member desires any additional non-cancellable disability income this option certainly should be taken advantage of.

Any member of the O.S.M.A. who would like to apply for these benefits can write Oklahoma State Medical Association Insurance Trust, 1240 First National Building, Telephone FO 5-1456, Oklahoma City, and specific rates and the firm involved will be gladly furnished, or such can be secured direct from any Veterans Bureau office.

CLASSIFIED ADS

OFFICE SPACE for lease. Ten rooms, two lavatories, private parking, air conditioned, ground floor. Will rent half or lease all. 1225 North Walker or call FOrEst 5-4842 or TR 8-3311.

FOR SALE: Complete office equipment and furniture, including x-ray and bucky (2 yr. old) for General Practitioner. May be bought on easy terms. Excellent opportunity for practice in town of 4,500. Long term lease on desirable office space available at low rent. If interested write for complete invoice of equipment, and details of opening for practice. R. O. Smith, M.D., 306 N. Willow, Fayetteville, Arkansas.

FOR SALE: Physician's instruments and office equipment. Mrs. Melvin Fry, 2007 S.W. 15, Oklahoma City, Okla. Phone CEntral 2-9284.

WILL BUILD TO SUIT PHYSICIAN. Plan your own office in building to be shared with Oklahoma City dentist. Choice location, 827 N.W. 10th. For details call CE 2-0000.

GENERAL PRACTICE OPPORTUNITY: Stuart, Oklahoma; to serve trade area of 1,500; partially equipped office available; good church town, new school; contact Robert Lee Nunn, Postmaster.

WANTED General Practitioner to give anesthetic in private clinic. Please advise qualifications in first letter. Box D, c/o THE JOURNAL, P. O. Box 9696, Shartel Station, Oklahoma City, Okla.

FOR SALE: Hamilton steelstone suite; mist green color. Consisting of examining table, treatment cabinet, waste receptacle, and stool. Also miscellaneous instruments for general practice use. All in excellent condition, less than two years old. Quentin T. Brooks, M.D., Western State Hospital, Ft. Supply, Oklahoma.

WANTED: Physicians, American Graduates for State Mental Hospital. Training Psychiatric preferred but not essential. Re-organized hospital; some housing available at nominal cost. Institution located in resort area. Good transportation adjacent Tulsa. Beginning salary \$10,000-\$12,000 depending upon experience. Write Box A, c/o THE JOURNAL, Oklahoma State Medical Association, P.O. Box 9696, Shartel Station, Oklahoma City, Oklahoma.

University of Oklahoma School of Medicine Announces Internship Appointments for 1957 Graduates

The following is a list of internship appointments of the 1957 graduates of the University of Oklahoma School of Medicine.

Name	Hospital	Location
Abbott, Mary I.	Mercy Hospital	Oklahoma City, Okla.
Bagwell, Kenneth H.	St. John's Hospital	Tulsa, Okla.
Barbee, Richard F.	Mercy Hospital	Oklahoma City, Okla.
Bird, Billy J.	Veterans Adm. Hospital	Oklahoma City, Okla.
Bliss, Bryce O.	St. John's Hospital	Tulsa, Okla.
Boles, Gerald W.	St. Anthony Hospital	Oklahoma City, Okla.
Braden, Barbara F.	Univ. of Oklahoma Hospitals	Oklahoma City, Okla.
Braden, Donald K.	Univ. of Oklahoma Hospitals	Oklahoma City, Okla.
Brown, Charles R.	Mercy Hospital	Oklahoma City, Okla.
Burr, John C.	Denver General Hospital	Denver, Colorado
Bynum, Chester L.	Mercy Hospital	Oklahoma City, Okla.
Coats, Jack L.	St. John's Hospital	Tulsa, Okla.
Compton, A. Paul	St. John's Hospital	Tulsa, Okla.
Cornelius, George R.	St. Anthony Hospital	Oklahoma City, Okla.
Crabtree, James A.	Los Angeles County Hospital	Los Angeles, Calif.
Dolenz, Bernard J.	Boston City Hospital	Boston, Mass.
Durham, Wilson E.	St. John's Hospital	Tulsa, Okla.
Dycus, Don L.	St. John's Hospital	Tulsa, Okla.
Ellis, Robert K.	Gorgas Hospital	Panama Canal Zone
Gebetsberger, Charles	Military Service	
Goodman, Thomas A.	George Washington U. Hosp.	Washington, D. C.
Green, James D.	St. John's Hospital	Tulsa, Okla.
Haddad, George N., Jr.	Jackson Memorial Hospital	Miami, Florida
Hewett, Horace E.	St. John's Hospital	Tulsa, Okla.
Holley, Paul S.	Univ. Kansas Med. Center	Kansas City, Kansas
Hood, John W.	Univ. Minnesota Hospital	Minneapolis, Minn.
Hope, Sherman A.	U. S. Air Force, Fitzsimmons Army Hospital	Denver, Colorado
Hubbard, Floyd T.	St. Anthony Hospital	Oklahoma City, Okla.
Hughes, William L.	Univ. of Virginia Hospital	Charlottesville, Va.
Hummer, Lloyd M.	George Washington U. Hosp.	Washington, D. C.
Jayne, Howard	Wesley Hospital	Oklahoma City, Okla.
Johnson, Richard B.	Parkland Hospital	Dallas, Texas
Jones, O. W., Jr.	Duke Hospital	Durham, North Carolina
Kalbfleisch, John M.	Univ. of Virginia Hospital	Charlottesville, Va.
Kearns, Harry J., Jr.	St. Anthony Hospital	Oklahoma City, Okla.
Keith, Howard B.	Univ. of Oklahoma Hospitals	Oklahoma City, Okla.
Kennedy, Willard C.	Univ. of Oklahoma Hospitals	Oklahoma City, Okla.
Kobs, Tracy L.	George Washington U. Hosp.	Washington, D. C.
Kouri, Sammy H.	Wesley Hospital	Oklahoma City, Okla.
Lambiotte, Benjamin J.	The Lankenau Hospital	Philadelphia, Pa.
Lang, Frederick L.	Mercy Hospital	Oklahoma City, Okla.
Livingston, David E.	St. Anthony Hospital	Oklahoma City, Okla.
Mackler, David L.	San Francisco Hospital, (Stanford Service)	San Francisco, Calif.
Martin, Fred R.	Detroit Receiving Hospital	Detroit, Michigan
McArthur, Lloyd G.	Military Service	
McGinnis, Delbert H.	The Queen's Hospital	Honolulu, Hawaii
Medcalf, Winfred L.	Mercy Hospital	Oklahoma City, Okla.
Meinhardt, Kenneth	Gorgas Hospital	Panama Canal Zone
Mings, Harold H.	Parkland Hospital	Dallas, Texas
Nash, Howard L.	Univ. of Oklahoma Hospitals	Oklahoma City, Okla.
Neal, Victor R.	St. Anthony Hospital	Oklahoma City, Okla.
O'Bar, Paul R.	Bellevue Hospital, (Columbia Division)	New York, New York
Orbin, Johnnie A.	St. Anthony Hospital	Oklahoma City, Okla.
Park, Riley W., Jr.	Emanuel Hospital	Portland, Oregon
Paul, Roger R.	St. John's Hospital	Tulsa, Okla.

Payte, James T.	Santa Rosa Hospital	San Antonio, Texas
Peter, Maurice L., Jr.	St. Anthony Hospital	Oklahoma City, Okla.
Peterson, Robert F.	Wesley Hospital	Oklahoma City, Okla.
Phillips, Donald M.	Univ. of Calif. Hospital	Los Angeles, Calif.
Price, King G.	Boston City Hospital	Boston, Mass
Reimer, J. Paul	U. Texas Med. Br. Hospital	Galveston, Texas
Riley, Lee H., Jr.	Johns Hopkins Hospital	Baltimore, Maryland
Rinn, Odville Alton	Santa Rosa Hospital	San Antonio, Texas
Ritan, John L.	Univ. of Oklahoma Hospitals	Oklahoma City, Okla.
Robinson, Charles W.	Univ. of Minnesota Hosp.	Minneapolis, Minn.
Savage, William L.	St. Anthony Hospital	Oklahoma City, Okla.
Shibley, George J.	Scranton State Hospital	Scranton, Pa.
Siddons, Ivan D.	U. Texas Med. Br. Hospital	Galveston, Texas
Simon, Robert B.	Presbyterian Hospital	Denver, Colorado
Smith, Bradley E.	U. S. Navy Hospital	St. Albans, New York
Smith, Gene R.	St. Anthony Hospital	Oklahoma City, Okla.
Smith, John R.	St. Vincent's Hospital	New York, New York
Smith, William O., Jr.	Kansas U. Medical Center	Kansas City, Kansas
Sprehe, Daniel J.	Charity Hospital	New Orleans, La.
Stansberry, Cecil R.	Mercy Hospital	Oklahoma City, Okla.
Stephenson, Jack M.	St. Anthony Hospital	Oklahoma City, Okla.
Steward, Rodney D.	St. Anthony Hospital	Oklahoma City, Okla.
Sullivan, Jerry W.	Baptist Memorial Hospital	Memphis, Tennessee
Talley, John E.	St. Luke's Hospital	Denver, Colorado
Thurston, Thomas W.	St. John's Hospital	Tulsa, Okla.
Vann, Paul N.	Public Health Service	Norfolk, Virginia
Vaughn, Thomas N.	Univ. of Oklahoma Hospitals	Oklahoma City, Okla.
Walters, Philip G.	Presbyterian Hospital	Denver, Colorado
Watkins, Wanda L.	Univ. of Oklahoma Hospitals	Oklahoma City, Okla.
Webb, Floyd E., Jr.	Cincinnati General Hospital	Cincinnati, Ohio
White, Wayne F.	Pierce County Hospital	Tacoma, Washington
Winn, Donald A.	Mt. Zion Hospital	San Francisco, Calif.
Yates, Loren K.	Santa Rosa Hospital	San Antonio, Texas

O.S.M.A. to Be Represented At A.M.A. P.R. Institute

Five persons will represent Oklahoma at the American Medical Association's Public Relations Institute to be held in Chicago August 28 and 29, 1957. From the State Office will be E. C. Mohler, M.D., Ponca City, President-Elect; A. T. Baker, M.D., Durant, Vice-Chairman of the Public Policy Committee; and Dick Graham, Executive Secretary. Representing the Tulsa County Medical Society will be Executive Secretary Jack Spears. The Blue Shield Plan of Oklahoma will send Carl Behle, Director of Professional Relations.

An annual affair, the Institute provides and opportunity for the exchange of medical public relations ideas and information. Leading off the meeting will be two panel discussions on medicine and publicity. Roland Berg of *Look* magazine, science writer John Troan of Pittsburg, and newsman Bob Clark of Louisville are among the participants. An entire afternoon will be devoted

to workshop-type discussion sessions of public relations problems of large and small state and county societies. Thursday morning's program includes a case history-type re-evaluation of grievance committee operations and a review of socio-economic and legislative problems facing medicine with suggestions for solving them.

Death

DANIEL PHILLIP RICHARDSON, M.D.
1869-1957

Daniel Phillip Richardson, M.D., died in his home in Union City on July 15 at the age of 88.

Doctor Richardson, who also had a very successful career in banking, was born May 4, 1869, at Alanthus, Missouri. He was graduated from Louisville Medical School at Louisville, Kentucky, in 1894 and moved to Union City 63 years ago.

Doctor Richardson was an honorary member of the Oklahoma State Medical Association.

Coming Meetings

HILLCREST MEDICAL CENTER 1653 East 12th St., Tulsa, Okla.

Lectures in Basic Science Given by Faculty Members of the University of Oklahoma School of Medicine.

Aug. 13—Porphyrins, porphyrinuria, etc., E. G. Larsen, Lecturer.

Aug. 27—Bone metabolism: osteoporosis, etc., A. A. Hellbaum, Lecturer.

Sept. 10—Recent Advances in Oncology, W. E. Jacques, Lecturer.

Sept. 24—Recent Advances in Viral Diseases of the respiratory System, L. V. Scott, Lecturer.

Oct. 8—Basic medical psychology, L. J. West, Lecturer.

Oct. 22—Heart Function: cardiac reserve, A. N. Taylor, Lecturer.

Nov. 12—Common Spinal Pathways, G. H. Daron, Lecturer.

Nov. 26—Cerebellar Structures and Function, G. H. Daron, Lecturer.

Dec. 10—Autonomics: Structure and Function, G. H. Daron, Lecturer.

Dec. 17—Central Autonomic Function as related to common medical diseases, C. G. Gunn, Lecturer.

POSTGRADUATE SHORT COURSE OU MEDICAL SCHOOL September 11, 1957

A postgraduate short course will be held September 11, 1957, from 3:30 to 8:30 p.m. in room 118 at the University of Oklahoma School of Medicine.

The subject for the afternoon and evening sessions will be "Congestive Heart Failure." Guest speaker will be Richard V. Ebert, M.D., of the University of Arkansas School of Medicine.

SOOUTHWESTERN CANCER CLINIC September 20 and 21, 1957 Ft. Worth, Texas

The Southwest Regional Cancer Conference will be

held September 20 and 21, 1957, in Fort Worth, Texas, with headquarters in the Texas Hotel.

Speakers for the meeting will be: Dr. Mark M. Ravitch, Baltimore; Dr. John D. Reeves, Boston; and Dr. Thomas M. Peery, Washington, D.C.

Oklahoma Chapter of the AMERICAN COLLEGE OF SURGEONS September 27-28, 1957

A meeting of the Oklahoma Chapter of the American College of Surgeons will be held at the Western Hills Lodge at Sequoyah State Park on September 28 and 29, 1957.

The Scientific Program will consist of the winning papers selected from the Oklahoma Association of House Staff Physicians presented at their annual meeting in May, 1957. The papers which will be presented are as follows:

AN EPIDEMIC OF BREAST ABSCESES

—Robert W. Dean, M.D., St. Johns Hospital, Tulsa

SPLENECTOMY FOR CONGENITAL HEMOLYTIC ANEMIA

—Robert Jabour, M.D., Hillcrest Medical Center, Tulsa

EXCISION OF INTERNAL CAROTID ANEURYSM EMPLOYING HYPOTHERMIA AND VASCULAR SHUNT—IN PREGNANT WOMEN (PATIENT IN FIRST TRIMESTER OF GESTATION)

—Karl K. Boatman, M.D., Oklahoma City

CHLORPROMAZINE AS A MASKING AGENT IN INTESTINAL OBSTRUCTION

—Duane A. Barnett, M.D., Ponca City

THE FUNCTIONING CARCINOID SYNDROME

—William R. McCabe, M.D., University of Oklahoma Medical Center, Oklahoma City

STUDIES OF POST-PARTUM PITUITARY NECROSES

—Carl Smith, M.D., University of Oklahoma Medical Center, Oklahoma City

For further information write the post graduate office of the Oklahoma Medical Center, 800 N.E. 13th Street, Oklahoma City, Oklahoma.

PHYSICIAN PLACEMENT

Anesthesia

Daniel B. Perry, Residence Quarters, Harlem Hospital, New York, N. Y., age 48, Meharry Medical College, 1948, interned at Harlem Hospital, New York and served residency in anesthesia there, veteran, available December, 1957.

General Practice

Louis Marshall Cuvillier, Jr., 1407 Woodside Parkway, Silver Spring, Maryland, age 44, married, George Washington University School of Medicine, 1938, interned at Garfield Memorial Hospital, Washington, D.C., one year residency in medicine and obstetrics at Norfolk General Hospital, Norfolk, Virginia. Veteran, available upon 90 day notice.

Orby L. Butcher, Jr., 3106 Alaska, Dallas, Texas, age 29, married, University of Oklahoma, 1955, now in surgical residency at VA Hospital in Dallas, Veteran. Available, July, 1957.

David L. Mossman, USAH, Orthopedic Department, Ft. Riley, Kansas, age 28, married, University of Vermont, 1954, available upon separation from service, December, 1957.

Robert R. Rupp, 1235 N. Lorraine, Wichita, Kansas, age 30, married, University of Oklahoma, 1956, internship at Wesley Hospital, Wichita, veteran, available, July 1, 1957.

Internal Medicine

Rensselaer, W. M. Clure, Mayo Foundation, Rochester, Minnesota, age 31, married, University of Kansas, 1948, veteran, available July 1, 1957.

James E. Morris, Jr., 1034 Second St., S.E., Moultrie, Georgia, age 26, married, University of Tennessee College of Medicine, 1953, one year internal medicine residency, now serving military obligation, available February, 1957.

Robert W. Datesman, 94 Oak Street, Westwood, Massachusetts, age 30, married, University of Pennsylvania, 1951, residency training at University of Minnesota Hospitals, and Boston Veteran Hospital, Veteran, available in July, 1957.

Joseph A. Ezzo, 3215 Nebraska, St. Louis 18, Missouri, age 32, married, St. Louis University, residency at St. Louis City Hospital and St. Louis University Hospitals, veteran, available, July 1, 1957.

Obstetrics-Gynecology

John P. Harrod, Jr., 932 E. 56th Street, Chicago 37, Illinois, age 33, married, University of Georgia, 1946, served residency at University Hospital, Augusta, Ga., Duval County Hospital, Jacksonville, Florida and at Chicago Lyons-In Hospital, Board certified, veteran, availability date unknown.

Bernard Martin Davis, Jr., 101 Turnbridge Rd., Baltimore 12, Maryland, age 31, married, Georgetown University, 1951, 3 years residency at University Hospital, Baltimore, veteran, available, July 1, 1957.

Pediatrics

Robert W. Mosely, 211 Adams Street, Galax, Virginia, age 32, married, Medical College of Virginia, 1948, residency at Walter Reed Army Hospital, Board eligible, interested in private practice or public health, veteran, available April, 1957.

Surgery

Aristides Cardona, 106 Sinis Rd., Syracuse, New York, age 30, married, State University of New York, 1951, Board eligible, wants additional residency, veteran, available, June, 1957.

Vernon L. Guynn, 2026 S. Second Ave., Maywood, Ill., age 32, married, University of Illinois, 1947, passed Part I of General Surgery Board, military obligation served, available January 1, 1957.

Alvin S. Natanson, 49 Kiernan Drive, Rantoul, Illinois, age 36, married, Tufts Medical College, 1949, residency training at Boston City Hospital, Diplomate of the American Board of Surgery, available upon separation from service, July, 1957.

James Firth Alexander, Charity Hospital, New Orleans, Louisiana, age 34, single, Ohio State, 1949, in orthopedic residency training now, veteran, available immediately.

Karl Edwin Blake, 2681 Crosby Avenue, Pittsburgh 16, Pa., age 33, married, University of Pittsburgh, 1948, residency at VA Hospital and Children's Hospital, Pittsburgh, Board Eligible, veteran, available May, 1957.

Urology

John C. Brazos, 406 South Washington, Watertown, Wisconsin, age 36, married, University of Illinois, 1949, interned at Anckee County Hospital, St. Paul, Minnesota, residency at Milwaukee County Hospital, Milwaukee, Wisconsin. Veteran, available upon completion of residency, July 31, 1957.

Paul Lucian Livingston, 18340 Lake Chabot Road, Castro Valley, California, age 35, married, New York Medical College, 1946, served residencies at Orange Memorial Hospital, New Jersey and at Veterans' Administration Hospital, Long Beach, California, now Assistant Chief Urologist at V.A. Hospital, Board Qualified, veteran, available upon sixty days notice.

CALIFORNIA STATE

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25 YEARS AGO



Articles published in *The Journal* of the Oklahoma State Medical Association August, 1932. Edited by John C. Matt, M.D., Tulsa.

DIPHTHERIA

George H. Garrison, A.B., M.D.
Oklahoma City

"This discussion is intended to bring before us certain practical points encountered in the diagnosis and treatment of diphtheria. For the five year period ending December 31, 1931, diphtheria was given as the cause of death in Oklahoma one thousand five hundred and sixty-seven times, (1567), and average of 321 each year. While we may rightfully expect a marked reduction in both the incidence and the mortality due to this disease during the next five years as a result of the increased effort toward universal immunization of susceptible individuals, it deserves some consideration now.

Kinnamann of Kansas makes this significant statement, "we have observed in Kansas that diphtheria is apparently of a more virulent type as the number of immunized children is increased. Immunized carriers pass diphtheria organisms of a virulent type to the non-immunized child with the result that the case-fatality-rate is increasing each year among the non-immunized children who contract diphtheria." Whether Kinnamann's explanation of this increased case-fatality-rate is entirely correct or not, such observations should serve to make us more determined to immunize all susceptible persons and put us on guard lest we err in the recognition of diphtheria . . .

Antitoxin

There is wide variation in the dose of antitoxin recommended in the treatment of diphtheria. It will ordinarily be considered sufficient to give 5000 to 10,000 units of antitoxin in early cases and those of moderate extent. In severe and toxic cases, especially if of several days duration, a dose of 10,000 to 20,000 units should be given with the larger dose receiving preference. Whatever dose has been decided upon it should be given at one time, though part of it may be administered by different routes, i.e. intramuscularly, intravenously or intraperitoneally, but not subcutaneously, because of slow absorption. A skin test for sensitization to the serum is advisable as a routine before injecting antitoxin and it is imperative that it be done before giving antitoxin into the vein. Quite often it will be observed that the visible membrane is even greater in extent 18 to 24 hours after injection and it is this which causes physicians to give a second injection of antitoxin. It appears that

this increase in the size of the membrane will usually occur regardless of the amount of antitoxin originally given. Diphtheria membrane requires time to develop and the pathologic process had already been initiated over a definite area before antitoxin was given and simply goes on to completion

Carriers

A small percentage of persons recovering from diphtheria will become "carriers" of the bacillus. When local treatment to the nose and throat fails after a reasonable time to eradicate the organism, removal of the tonsils and adenoid tissue is usually successful in clearing up the condition.

Immunity

The degree of immunity which a patient develops as a result of diphtheritic infection is widely variable. Most individuals become permanently immune, some are immune for only one year or two years. If the immunity remains for two years, it will probably be permanent. It is essential then in view of the possibility of a loss of immunity after a period of time, that we advise every patient of this possibility and urge upon him the necessity for having a Schick test done after one year and after two years. If he should show a positive Schick, he should be immunized."

FIFTIETH ANNIVERSARY OF FIRST REMOVAL OF GALL-BLADDER: SOME IMPROVEMENTS OVER THE PAST

"The writer, a son of a physician, relative of many others of the same profession, recalls with interest the various progressive steps of medical and surgical advances, though, at the time hardly realizing 'what it was all about,' or the importance of the so-called new operations or endeavor. Among those recalled especially where the opening of the abdomen, in the then 'out West,' a most serious procedure, and, if successful, the making of the surgeon bold enough to undertake the work. All of these in Indian Territory, up to a certain time were performed in the face of grave emergency, that is, it was certain death if operation was not performed, and almost as certain if it was. A case is recalled where diagnosis of acute appendicitis was made on the first day, operation positively advised, and with equal obduracy refused; finally, when the patient decided he would be operated upon the surgeon refused to operate in the face of obvious wide-spread peritonitis, so the patient remained in bed for more than a month, for days death daily expected, but being Irish and full of resistance, by some freak of nature the enormously distended abdomen, with a respiration rate, due to pressure, unbelievably high, slowly subsided, the man got well without operation, of course, proving the surgeon wrong, and as not knowing what he was talking about. These freaks are occasionally seen by all men with more or less experience. Today we are concerned with the first operation for removal of the gall-bladder. Frankly decided upon in advance, worked out decision to do a cholecystectomy. This operation was performed by Carl Langenbuch,* then chief of the Lazarskrankenhaus, Berlin, July 15, 1882. The article

does not state the various data, history, etc., simply that he removed a gall-bladder, and that the patient recovered. All over the world, it seems simultaneously men began to do operations which had up to then been considered unusually formidable or positively "taboo." As reports began to circulate from one country to another the aggregate data was digested, the weak spots noted and eliminated, and soon rules based upon sound reasoning began to be applied to surgical conditions until it would have seemed that the last word had been spoken. However, it seems that there is no "last word," there are constant changes, constant advances and improvements. I recall the day when it was "fashionable" in abdominal surgery to use not less than three to five gallons of sterile or some form of antiseptic solution in the abdomen, to wash out debris, pus, blood, or "what have you?" After a time this gradually gave way to absolutely dry moppings, for the same purpose. Now at times there is a happy medium; occasionally there is a case where solutions are used and justifiably, but they are rare. The good things of yesterday are cast aside or improved upon, the cold glare of scientific reasoning is applied and rationalism rules, or is supposed to rule every manoeuvre or procedure. It has been one long day of continuous improvement, however, since the July 15 when Langenbuch removed the gall-bladder, the death rate in many things has almost wholly disappeared, the morbidity rate has kept pace with other improvements, until some fatuously imagine that the "last word has been spoken," that there can be no further advances. A moment's reflection should show us, if we apply the history of past events that probably there will be improvements all along the line. Medicine today is full of baffling, unsatisfactory results from the best and most accepted treatment. Slowly there will be improvements in these until finally that which today appears so baffling and irritating will be a matter of ease, and we will turn to some other problem."

*Archives of Surgery, July 1932

Editorial Notes—Personal and General

"DR. JOHN F. PARK, McAlester, has returned from a trip visiting European Clinics"

DR. AND MRS. F. G. DORWART, Muskogee, will spend a month in the hills on the Illinois River during September.

DR. R. M. HOWARD, Oklahoma City, was elected President of the American Goiter Association, at the last Annual Session held at Toronto. The convention will be held in Switzerland next year"

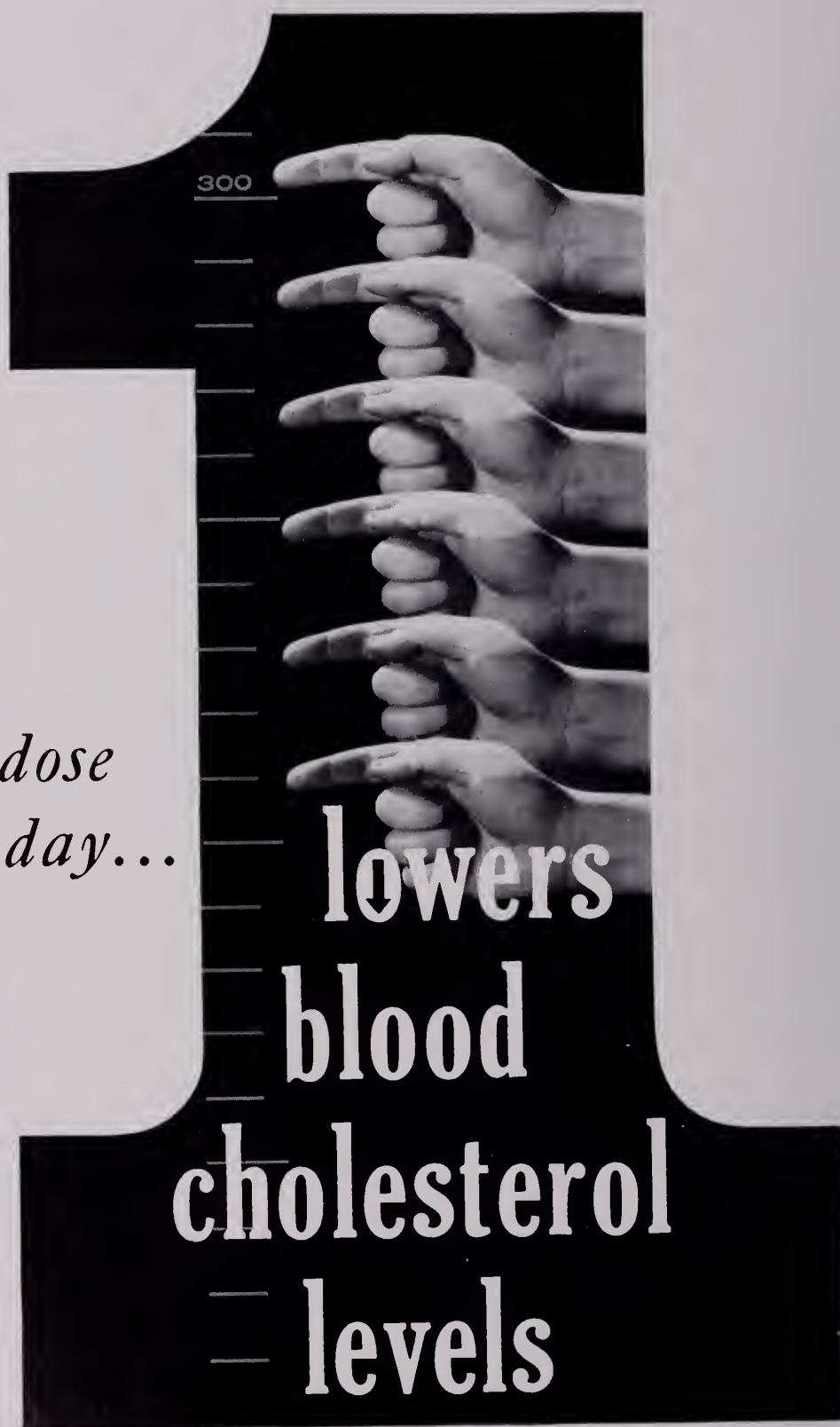
TREATMENT OF CARDIAC ARRHYTHMIAS

(Continued from Page 386)

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levels**



Concerning Medical Care of People Receiving Old Age Assistance

The administrative agency made to order for the purpose is Blue Cross and Blue Shield. I hope the Welfare Department can be persuaded of this. Perhaps the following categorically stated reasons will help.

1. These organizations are neither medical, political nor profit making. Their trustees are physicians, businessmen and hospital people, who have no interest except to help people in groups pool their resources for each other's medical and hospital care when needed. Accumulated reserves are held to pay for unusual numbers of hospitalizations, to increase and to extend benefits, and to fluctuate hospital and medical payments with changing costs. Their record of fairness has earned them the respect of all with whom they deal. Their executive director is a fine fair-minded gentleman of extraordinary administrative ability.

2. Such an organization can effectively remove the stigma of socialization from the present program by acting as a buffer between all parties concerned. Irritations and misunderstandings on both sides can be avoided. The plan for the aged would be removed from the political arena.

3. If the Blue Cross and Blue Shield were asked to write a plan with as complete coverage as possible for the amount available per person per month, the State and the Welfare Department would no longer be uncle. The amount available in days and service for the year would be a savings. The recipient should want to conserve this against future needs and not exhaust it by unnecessarily prolonging his treatment or hospital stay.

4. If the Welfare Department administers the program, in the minds of the doctors and the hospitals, these people will be considered Welfare Department patients. The desire of all to fix things so that they can pay their own way will be lost. If on the other hand, in response to the doctor's

question "Can you manage your hospital bill?" they can reply, "We have Blue Shield and Blue Cross," they would be in the same category as anyone else who could reply in the same way. Wouldn't this be far better than the reply, "The Welfare Department will pay the bill"?

5. From our point of view, the advantages to be gained by avoiding the stigma of socialization would far outweigh the additional cost. From the standpoint of the Welfare Department, I am confident that future negotiations for other coverages would be entered into on merits alone. The onus of political medicine and socialized medicine would be removed.

6. One word about the nature of Blue Cross with which I am more familiar. There are those who insist that because they believe in private enterprise such an organization on a non-profit basis has no right to exist. They seem unaware of the fact that the enterprise is hospitalization — not insurance. To be sure, hospitalization insurance becomes private enterprise where the total cost of hospitalization is increased by whatever amount the insurance company puts in its pocket. Blue Shield and Blue Cross have operating expenses of 7% or less. All the rest of the monies taken in are held in reserve for future use or paid out for medical or hospital care. The enterprise of these plans is to pay hospital bills and doctors bills for people who have pooled a small amount of their income for that purpose; it is not to make money. The cost of medical and hospital care is high enough now — why add to it the support of hundreds of insurance companies?

Our committee in all good faith and after many hours of work has presented a program to Mr. Rader which he and his commission has approved in its essentials. In order to see that the funds are conserved and used where they are most needed, the modifying phrase "life in danger" is used. This means that hospitalization and medical care is ap-

proved only for the recipient whose life is in danger. "Life in danger" is open to many, many interpretations and will compound the false thinking we already do to favor the patient over the insurance carrier. But what is far worse for our intermedical relationship, it puts the hospital in the position of having to decide whether the doctor knows what he is talking about when he says the patient's life is in danger. No program built on such a nebulous base can be sound. This one must be if we are to build a structure that will also support future programs which will be needed and which must come. I believe that Blue Cross and Blue Shield can write a program that will be actuarially sound and in which theirs will be the only watch dog necessary.

We have all worried lest Blue Cross and Blue Shield get so big nationally that we would lose any vestige of local control and that the tail would in reality wag the dog. If Mr. Rader and our Welfare Department could work out a sound program for welfare recipients with Blue Cross and Blue Shield—a program so well conceived and developed (and I think Mr. Helland can do it) that it would serve as a model — two great ghosts would be laid to rest. Blue Cross and Blue Shield would be contained locally and the great specter of nationalization of what social medicine is necessary would not appear. Mr. Rader's interest in the medical profession makes him the ideal commissioner to implement a program which retains what is best in medicine as we know it and apply

it to that group of people whose reach it is beyond. Through him a wonderful opportunity exists for setting a pattern of limited but necessary socialization that will endure without endangering the best in our system.—B.H.N.

A. S. Risser, M.D.

For fifty-two years Arthur Risser served the people and the profession of Oklahoma well. He was a stalwart, stable, dependable and predictable man whose Christian costume became him and was not taken off and put on as the occasion suited. One had a feeling that there was nothing else he could wear—that there was nothing he or anyone else could do about it.

Coming to Oklahoma from Kansas where he had worked with Doctor Hertzler, he settled in Blackwell in 1905. Here he worked and grew in stature as the community developed. He served as president of the Oklahoma State Medical Association 1926-27 and later was our representative on the House of Delegates of the American Medical Association. The community effort of which he seemed proudest, however, was his part in the development of the Blue Cross Plan. He served as President of the Board of Trustees from its inception in 1940 until his death. In this capacity his stable character and steadfastness of purpose served the plan and the people it protected well. Oklahoma medicine needs many more men like Arthur Risser.—B.H.N.

Cycloplegia and the Optometrist

A question of malpractice for the M.D.

It has been brought to our attention that occasionally practicing physicians have been asked to administer cycloplegic medicine for optometrists so that the optometrist may then refract (fit glasses) to children and complicated refraction cases. It is also noted that certain M.D.'s do not know that optometrists are not medically trained and not legally allowed to use or prescribe medicine in any form. They are not doctors of medicine and only use the title of doctor because

of state legislative action.

Although this has happened in only a few isolated instances, the dangers involved are considerable.

Optometrists are not trained to the degree that they can judge the type of case needing cycloplegia and the great majority of them realize this and do not compromise a friendly physician in this way.

From *Maine Medical Journal*, February, 1957.

Guest Editorials

Influenza

L. VERNON SCOTT, Sc.D.

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The occurrence of an epidemic of influenza in Asia during the Spring and Summer months of 1957 became of great concern to the Respiratory Disease Unit of the U. S. Public Health Service working in cooperation with the World Health Organization. With rapid transportation, increased world trade, and a traveling world population the possibility of a pandemic became a probability. All laboratories which had been designated as cooperating laboratories were advised to keep a close watch for sporadic cases of this disease throughout the world. Work was immediately undertaken to isolate and study the nature of this virus. A strain of influenza virus was isolated in Singapore¹ in early spring of 1957. Identification of this virus was difficult, but studies have shown it to be a member of the "A" immunological type of influenza viruses.

Up to the present time there have been four main immunological groups of influenza viruses studied Groups A, B, C D.^{2,3} Each group is comprised of a completely distinct set or family of viruses. The variation in antigenicity among these viruses has been clearly demonstrated in vaccine studies and still remains a basic problem in the development of an effective control of the disease by immunization. Groups A and B have been known for quite some time and have been the subject of much study. Illnesses caused by strains of influenza, groups C and D, are seldom recognized and the nature of these two groups is not as well understood. Members of groups A and B produce the same diseases. However, the disease produced by strains of group B is, in general, of a milder type than that of the A group. The epidemic periodicity of group A is two to three years while that of group B is four to six years.

Since the beginning of laboratory study

of the influenza viruses, four serologically different but related sets or families of group A influenza virus have been studied. These may be referred to as the Swine, PR8, FM1 and Asian families and strains within each family have been successively responsible for outbreaks of influenza for the past 30 years or longer. By serological evidence influenza viruses closely related to the Swine virus were probably responsible for the pandemic of 1917-1919 and remained prevalent throughout the world for a period of 10 years and then disappeared.⁴ The first time an influenza virus was isolated from man was in 1933 and this virus was shown to be distantly related to the Swine virus. This new family has been called PR8 and this strain is the prototype. Studies on the nature of these viruses involving antigenic analysis of strains, protective effect of vaccines and epidemiological studies have shown that the group A influenza viruses prevalent for 10 years after the isolation of PR8 virus were members of this family. In 1946-47, the FM1 family commonly known as the A-prime virus appeared as the etiologic agent of influenza in the world and completely replaced the earlier families as the prevalent group A virus. During the past 10 years strains of this FM1 family have been isolated and studied throughout the world. The emergence of a new group or family has been anticipated and early studies strongly indicate that this Asiatic strain has evolved as the fourth family and this will probably replace the existing family, FM1, as the prevalent cause of influenza type A disease. Studies have been underway for the past few years in order to detect, as soon as possible, a modification of antigenic structure among strains of influenza viruses. Studies on viruses isolated in early 1956 from widely separated areas of the Northern Hemisphere showed that the isolates differed sharply from previous isolated strains. However, it wasn't until this new virus was isolated that a clear distinction was noted. The antigenic differences in the strains are detected with the use of the hemagglutina-

tion inhibition test and relationships of the families in the group A are demonstrated by the complement fixation test. However, it cannot be stated that it is a new family until this virus has been thoroughly and adequately studied. It may be just another strain of the PR8A or FM1 A-prime families. At the present time the designation Far East strain is the preferred title for this virus.

Since the isolation of the new strain of virus, epidemics have been studied in nearly all of the countries of the Near and Far East, including Korea, Japan, Australia and many islands of the East Indies Group. It has been found in several countries of Europe, in the Sudan of Africa, and in Chile in South America. The first outbreak noted in the United States was during May in California from personnel aboard ship. Later it was found in human beings in coastal areas both East and West who were returning to the United States from epidemic areas, particularly from the Orient. In late June and early July there was a sharp outbreak among students and adult leaders in Grinnell, Iowa. From that meeting the virus has spread to several localities. The United States Public Health Service has watched with interest all large meetings where delegates came from various sections of the United States as well as outside to follow the possible spread of the virus while the meetings were in progress as well as subsequent outbreaks of the disease in local communities upon return of the delegates. Several cases of the disease occurred following the Boy Scout Jamboree in Valley Forge, Pennsylvania. By August, 1957, the virus had been isolated from cases of the disease in several states in this country. There had not been a laboratory diagnosis of influenza in Oklahoma due to this Far East virus by that time. However, this does not mean that there have not been cases. The last virus isolated in Oklahoma was a strain of group B.⁵

How does this virus differ from the influenza viruses which have been studied previously? The disease produced by this virus is that of typical influenza with involvement of the respiratory system. There is no involvement of the gastro-intestinal

tract with this disease. The attacks of the disease caused by the Far East virus that have been studied have not been severe and the deaths are attributed primarily to secondary bacterial infections. It has been shown that the usual laboratory animals (chick embryo, mouse, ferret) and tissue culture are susceptible and that this virus reacts similarly to the rest of the influenza viruses. It differs from other influenza viruses in that antisera produced against former strains will not neutralize this virus. Animals inoculated with vaccines which do not contain this strain are not protected against future challenge with the Far East virus.

It is difficult to diagnose a sporadic case of influenza without the aid of the laboratory. However, the epidemic pattern of the disease aids in the diagnosis. In the laboratory specimens of throat gargles or nasal washings from patients can be inoculated into embryonated hens eggs for the possible isolations of the virus. These specimens must be obtained during the first 48 hours of the disease, treated with antibiotics to free the specimen of bacteria and inoculated directly into the chick embryo or kept frozen at -70° C until isolation techniques can be done. The isolated virus must be identified and this is usually done with serological procedures. If isolation techniques do not yield a virus serological tests can be performed on acute and convalescent serum specimens to detect the response of the host to this disease producing agent.⁶

Vaccines are being prepared for use as a prophylactic measure against this disease. Six biological houses working on round-the-clock shifts have produced a trial vaccine that is being tested for potency at the present time. It is hoped that by mid-September eight million doses will have been produced, half of which will go to the Armed Forces. By February 1, 1958, it is anticipated that sixty million doses will be available. At the present time a monovalent vaccine instead of the usual polyvalent one is being considered which will include only the Far East strain. This is being considered to expedite vaccine production but the polyvalent preparation including the existing strains remains the preferred one. If the virus does not

mutate and the epidemic which this community experiences is caused by the Far East strain the monovalent vaccine should protect the susceptible population.

Epidemics of influenza are seen rarely during hot weather, however an epidemic can be expected when cool weather comes. If this strain from a new family of influenza is prevalent and attacks the susceptible population of this country, many epidemics or even a pandemic can be expected unless the vaccines are available and effective. Antibiotics have no effect on the proliferation of this virus. Attention should be called to the fact that there has been a sharp increase in the incidence in the number of cases of streptococcal infections in Oklahoma during the past year.⁷ This bacterium is one of the agents responsible for secondary infections following an attack of influenza.

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Policy on Vaccination

The following is a Proposed Program of Action to Combat Possible Outbreak of Oriental Influenza in the United States sent to the Board of Trustees of the A.M.A.

As to the question of vaccination, the Board of Trustees of the American Medical Association voted to cooperate with the United States Public Health Service in providing the public with information as to the need of vaccination against Asiatic influenza, provided the vaccine is safe and effective and there is a need for widespread immunization.

Following the action of the Board, a group of Trustees met with the Secretary of Health, Education and Welfare and the Surgeon General of the U.S.P.H.S. and ap-

proved the following statement for publication:

7/22/57 Surgeon General, PHS

"The Public Health Service, in cooperation with the medical profession, will stimulate and promote a nationwide voluntary program of vaccination against the prevalent strain of influenza. It will not, however, request Federal funds for the purchase or administration of vaccine—except for its own legal beneficiaries. The State and Territorial health officers and the American Medical Association have jointly assured the Surgeon General that community resources, both public and private, will be mobilized to provide vaccinations for persons who are unable to pay for such protection."

Introduction

Reports indicate an epidemic of influenza began in Hong Kong and Singapore in April 1957. Then, in rapid succession, almost simultaneous epidemics occurred in Taiwan, the Philippines, the Malayan States, Indonesia, Japan and India. There have been some reports of cases among U. S. military personnel in the Far East. A number of sharp outbreaks also have been reported aboard commercial and U.S. Naval vessels.

The disease is characterized by rapid onset, fever, malaise, muscle aches, coryza of three to five days' duration. In general, the attack rate seems to be about 15 to 20 per cent of the population in the affected countries. Mortality rates have been low.

Early in June, the Surgeon General of the U. S. Public Health Service called a series of meetings at which representatives of the medical and public health professions were invited to give advice with respect to preliminary plans for dealing with the influenza epidemics should it become widespread in the United States. On June 26, representatives of the American Medical Association met with the Surgeon General to discuss the question of medical manpower demands and other precautionary measures in the event that an epidemic should occur.

The Executive Committee of the Board of Trustees promptly pledged the support and cooperation of the American Medical Association. It requested that a program of action be prepared and submitted to the Board of Trustees for study and appropriate action.

Subsequently, a meeting was held, July

9, 1957, at A.M.A. headquarters in Chicago to discuss a program of action and to draft recommendations for presentation to the Board. Dr. Harold C. Lueth presided over the meeting which was attended by Dr. William H. Stewart of the Public Health Service and Dr. Madison D. Brown of the American Hospital Association. A.M.A. representatives included Dr. George F. Lull, Dr. Austin Smith, Dr. Edward Pinckney, Mr. Leo Brown, Mr. John Bach, Mr. Tom Hendricks and Mr. Frank W. Barton.

Summary of Data Reviewed and Factors Considered

The current status of the influenza epidemic has been discussed in an editorial entitled "Oriental Influenza Epidemic" *JAMA* 164:974, June 29, 1957; Public Health News release, *JAMA* 164:1136-7, July 6, 1957, and in a news release of the Public Health Service of June 10, 1957.

Through the Public Health Service and the World Health Organization, reports of the disease, worldwide, are received daily. Regular weekly reports, morbidity and mortality, reflect the current situation. There are several reports of influenza occurring in military bases in the Continental U. S. Also, some reports of influenza epidemics have been suggested in civilian communities. However, they have not been substantiated by virus identification.

A brief summary of the influenza epidemic characteristics includes:

- (a) Ineffective agent—virus Japan 507 of 1957
- (b) Incubation period—probably 1-2 days
- (c) Incidence—variable, figures not entirely reliable—15-20 per cent
- (d) Contagious period—uncertain, 1-5 days
- (e) Transmission—droplet infection
- (f) Symptoms—fever, prostration, headache, lassitude
- (g) Signs—coryza
- (h) Course—generally short duration, 3-5 days
- (i) Complications—rate, not serious except in the very young, old or those debilitated

- (j) Treatment—no specific therapy, usually symptomatic; antibiotics of little value; good nursing care
- (k) Mortality—figures unreliable, probably quite low except in the young, old or those debilitated.

There are inherent problems in attempts to draw conclusions from the influenza epidemics of the Far East and its appearance in the Continental United States. In the Far East where overcrowding, malnutrition, insufficient sanitation and presence of other human diseases are prevalent, the situation differs from that in the United States. The appearance of the disease among United States military personnel cannot be used, without modification, in forecasting probable effects among civilian communities and personnel as factors such as earlier immunization of military personnel with influenza vaccine, strict military control, regular sick calls, ready availability of medical and hospital care have their influence on the disease. Experiences in the Far East among military and civilian personnel are, however, the only guides that are currently available.

Consideration must be given to the medical, economic, and political impact of any epidemic that appears suddenly and attacks 15-20 per cent of the population. The A.M.A. would do well to have sound medical plans and an effective organization to meet the medical aspects of an influenza epidemic. The rapid onset of the epidemic makes it mandatory to have plans prepared well in advance and to see that local medical societies are cognizant of the magnitude of the problem prior to the occurrence of the epidemic. It is evident from experience gained in poliomyelitis outbreaks that the public looks to the medical profession and the Public Health Service for leadership in these emergency situations. It is imperative that the A.M.A. have a plan that is flexible enough to cope with a quick-spreading influenza epidemic. The plan must be realistic and suitable for implementation by state and local county medical societies.

Reports indicate the degree of prostration is such that patients become bedridden within a short period of time. In the military,

the majority of patients were hospitalized. Among civilian groups, greater reliance must, of necessity, be placed on home care as the current high occupancy rates in civilian hospitals does not permit large numbers of influenza patients gaining admissions to hospitals. Special situations would develop in civilian groups if the disease occurs in camps, large meetings, or assemblies as too frequently there are not adequate reserve facilities available for providing bed care for large numbers of patients who suddenly become ill. Each community should make a serious study and have suitable plans to cope with epidemics that might occur.

The use of vaccine in an influenza epidemic poses many problems. There may be difficulty in obtaining a large enough quantity of vaccine of this specific strain early enough so that it may be administered in sufficient time to evoke an adequate protective antibody response. There is question as to type specificity of vaccine. There would be difficulty in administering the vaccine depending upon public and professional acceptance. If it were a mild influenza epidemic, it is quite likely that the medical profession would find it difficult to use the supply manufactured. If it were a sudden large-scale epidemic, there would be a great clamor for the vaccine at a time when the epidemic is at its peak and when the vaccine would be the least effective. This would present a difficult problem. Method of control of the vaccine would present all of the problems encountered by the distribution of the Salk poliomyelitis vaccine.

Antibiotics are generally agreed to be ineffective in virus infections. It is felt that there would be a certain amount of public demand for the use of antibiotics in influenza epidemics. Since it is well known that primary influenza infections often are followed by secondary bacterial infections, a degree of justification in the use of antibiotics can be advanced.

In addition to the resources within the Association there are a number of other resources available. The Surgeon General of the Public Health Service has pledged the resources of the Public Health Service to the A.M.A. in the matter of furnishing in-

formation and assistance preceding and during the period of an influenza epidemic. These include: technical reports giving incidence rates, nationwide and worldwide; resources for the isolation and identification of infecting agents; sending of special epidemiologists to areas upon request for studies in the spread and control of epidemics; assistance to the state and local committees upon request for augmentation during an influenza epidemic.

The Department of Defense can be requested to furnish information concerning its experience in influenza cases among the military personnel and in their clinical handling of these patients. The Commission on Influenza of the Armed Forces Epidemiology Board has made continuing studies on the problem of influenza and could be requested to furnish specific information. The World Health Organization has a steady flow of information on reported influenza cases as they occur throughout the world.

Assumption as to Alternate Courses Epidemic May Take

Based upon the foregoing information reviewed by the study group on July 9, it appears that should an influenza epidemic break out in the United States, it would take the following alternate courses:

(1) Few minor sporadic outbreaks this summer but disappearing without large scale epidemic;

(2) Explosive outbreak of influenza in the summer of 1957 (before September 1) with same attack rate and mortality rate as currently exists;

(3) Few minor sporadic outbreaks this summer with explosive outbreak in fall or winter of 1957 (after September 1) with same attack rate and mortality rate as currently exists;

(4) Explosive outbreak in fall or winter with high attack rate and high mortality rate (similar to 1918).

Recommended Program of Action for A.M.A.

The study group believes that the American Medical Association should provide the leadership in formulating an appropriate in-

formational and operational program to acquaint state and county medical societies, as well as the general public, of the possible outbreak of a rapidly-spreading type of influenza in the United States. The rapid onset of this influenza makes it essential to inform medical societies of the magnitude of the problem well in advance and to encourage the development of plans prior to any outbreak. Too little and too late could be disastrous, even though it is recognized that some portions of the program may never be used.

It is therefore suggested that the Board of Trustees give consideration to adoption of the following courses of action:

Informational Phase

(1) Immediate publication of a series of articles in the *A.M.A. Journal* informing the membership of the nature and extent of the current influenza epidemic in the Far East. These articles should provide scientific data so that influenza cases may be recognized immediately and properly treated.

(2) Publication of a report in the *A.M.A. Journal* from the Council on Drugs concerning therapy and use of antibiotics in influenza cases.

(3) Publication in the *A.M.A. Journal* of articles prepared by the Public Health Service and other agencies covering the clinical aspects and current reports of the incidence of the disease. Dr. William H. Stewart indicated the PHS will provide a steady flow of information.

(4) Publicize in *Today's Health* and through other appropriate channels information which will reassure the general public there is no cause for alarm concerning an influenza outbreak in view of the fact the illness is of short duration, it is generally mild and with few complications, and it has a very low mortality rate. Emphasis should be made concerning the close cooperation between the A.M.A. and the Public Health Service and that adequate plans and operational facilities are available to the medical profession to cope with the problem.

(5) An outline plan of public information

should be prepared and instituted by the Public Relations Department.

(6) Should it appear the epidemic will reach explosive outbreak, then informational pamphlets, spot radio and TV announcements should be prepared by the Public Relations Department in cooperation with the Bureau of Health Education. In turn, other phases of the program should be expanded and intensified.

Operational Phase

(1) Immediate steps should be taken to inform state and county medical societies of the impact of influenza epidemics on normal professional services.

(2) The A.M.A. should suggest that state and county medical societies prepare or develop adequate stand-by programs and plans to cope with any such epidemics.

(3) In the formulation of these plans, consideration should be given to expanded professional care through the utilization of all medical personnel, regardless of type of practice.

(4) Plans should include mobilization of other professional resources such as nurses, nurses' aids, pharmacists, and others.

(5) Action to make full use of hospital facilities should be explored, such as curtailment of elective surgery, diagnostic studies, etc. The use of FCDA Emergency Hospital units might be required.

(6) Recommend that state and local programs be coordinated with public health agencies and state and local health departments. There should be close cooperation concerning diagnosing and reporting influenza cases. Joint planning may be advisable in many areas.

The Committee on Civil Defense of the Council on National Defense offers its full cooperation to the Board of Trustees in the implementation of the proposed program. The Committee maintains liaison with state emergency medical service committees and through its other numerous contacts in the field of medical disaster preparedness, it could assist in coordinating the activities of the Association, the Public Health Service, and the state medical societies.

Scientific Articles

Evaluation of the Present Use of

CESAREAN SECTION

ROBERT A. COSGROVE, M.D., F.A.C.S.

The purpose of the cesarean section operation is to deliver a healthy living infant to a surviving well mother when other means of delivery are fraught with certain or highly probable damage to either. However, it is an unnatural method of delivery; it is a major surgical procedure involving the transversing of a body cavity; and it usually means that the infant is delivered into a new environment without the normal reactions, whatever they may be, which take place during labor. Because it is a major surgical procedure, despite all improvements, it does have a higher maternal mortality than natural vaginal delivery, and despite the apparent certainty of elective operations in producing healthy children, such is unfortunately not always the case. At the Margaret Hague Maternity Hospital the maternal mortality accompanying cesarean section is 0.6 per cent (5,075 cases) which is a multiple of the total hospital maternity mortality. The fetal mortality rate is also much higher than the total hospital fetal mortality, but often this is pertinent to the complication for which the operation is done rather than to the operation itself.

The foregoing noted increased fetal and maternal mortality behooves us to examine the use of the operation to insure its necessity in each particular case.

Incidence

The reported incidence of cesarean section from institutions of good reputation usually is between two per cent and five per cent. Less well controlled and often unpublished statistics indicate that there are some institutions with cesarean section rates that may even approach 20 per cent. Because of the wide variation in incidence, it is helpful to determine the means of arriving at a satisfactory and legitimate percentage of

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This paper was presented at the Annual Meeting of the Oklahoma State Medical Association, May 7, 1957, in Tulsa.

instances of the performance of cesarean section.

With the known increased maternal mortality of cesarean section, it is apparent that the only excuse at all for the operation is the increased salvage of the infants so delivered. When an increasing incidence of cesarean section fails to provide an increased fetal salvage, no further increase in the cesarean section rate is either necessary or desirable. It is our personal opinion that this rate may legitimately be increased, particularly in view of the large number of repeat cesarean sections that are done, to five per cent or even eight per cent, but probably no higher. In addition to the mortality rates of mother and infant in the primary cesarean section, consideration is also necessary for the future pregnancies of the particular woman, since in most cases the performance of a cesarean section necessitates a repetition of the operation in all subsequent pregnancies. This not only increases the danger to the mother with each subsequent cesarean section, even though to a slight degree, but necessarily limits the number of subsequent offspring. How much this is due to particular changes in the uterus, and how much is due to the disinclination

of women who have had one or more cesarean sections to bear further pregnancies is debatable, but its existence is certain.

Morbidity

In addition to the above noted maternal and fetal mortality, there is also an increased morbidity associated with the performance of cesarean section. If one uses the Maternal Welfare Committee standards of morbidity, approximately one third of all cesarean sections show some degree of morbidity. In most instances this is simply a mild febrile reaction for perhaps one or two days beyond the first 24 hours. Since the advent of Blood Banks and antibiotics, professional Anesthesiologists, and improved training and technic of surgeons, the operation generally should have little serious morbidity. Nevertheless, the spilling of blood and amniotic fluid into the abdomen, the lack of adequate preparation of the patient in many instances, the presence of intercurrent complications, respiratory infections, sometimes impending shock from hemorrhage in non-elective cases, all are factors which do increase the morbidity of the operation beyond the possibility of control in many instances.

The fetal morbidity is generally unknown, but it is apparent in studying statistics of the procedure that many infants delivered by cesarean section are not as vigorous and animated as one would desire. We think that it helps in reducing the infant morbidity to provide initial gravity drainage of the respiratory tract at least until the infant is crying satisfactorily, even before cutting the cord, and having present competent personnel, well trained in proper resuscitatory methods, to handle the infant. Gastric lavage is often helpful, but drugs, except oxygen are relatively disappointing in providing proper resuscitation to most of the infants born with varying degrees of anoxia. We believe that many infants delivered by cesarean section should be transferred to nurseries if special handling facilities are available there, regardless of the actual weight or size of the infant.

Type of Operation

The low transverse cervical operation seems to us to fulfill in the highest degree

the general requirements of a satisfactory operation. The incision is thus made through the least contractile portion of the uterus and in the general direction of most of the muscle fibers which results in lessening of the blood loss. We think that it heals better; that by being completely peritonealized and beneath the bladder flap adhesions are prevented which might complicate subsequent operations, and that possible infection is localized outside the peritoneal cavity. It is easy to repair, and even if it subsequently ruptures our experience has been that such ruptures are not catastrophic and very frequently can be handled without loss of either mother or the child.

In the presence of large variococities usually radiating upward from beneath the base of the bladder, a vertical incision is better since it avoids transverse cutting of such variococities. The thickness of the uterus from one part to the other of this incision, however, varies considerably making closure somewhat difficult, and if the area is to be completely peritonealized it necessitates an abnormally high bladder flap which may interfere with subsequent operations. It may be necessary in the presence of abnormal contraction rings or very large or deformed infants.

The extra-peritoneal cesarean section we believe does lessen the danger of death from peritonitis, and since in any series of cesarean section deaths a number are still due to peritonitis, we think that in certain indicated instances the extra-peritoneal cesarean section is the operation of choice. It takes longer; it is technically more difficult; but we think that it should be part of the technic of any competent obstetrician and that it should be available when needed.

We believe the so-called classical operation done through the corpus of the uterus is an archaic procedure even though when done by competent personnel the results do not differ very much from other types of cesarean section. Our own experience indicates that it is the most dangerous scar in relation to subsequent pregnancies, since if it does rupture it is much more apt to be catastrophic than the low uterine operations often with loss of the fetus and sometimes even the mother. The real danger of the classical op-

eration is its use generally by practitioners who are seldom experienced and little trained in obstetric procedure, so that it is often done incorrectly.

Other types of cesarean section such as the Portes and Porro are generally considered archaic even though the name Porro is often used to designate a cesarean hysterectomy which it is not. There are also instances where atypical operation must be done because of the presence of tumor, vascular changes, or other abnormalities of the uterus itself. In such instances the best type of incision is the one which will produce the best results regardless of where and in what direction it is made. Since hysterectomy is often a subsequent associated procedure the incision is often of little consequence.

Anesthesia

Spinal Anesthesia is used for about 98 per cent of our cesarean sections. In our hands it has been satisfactory. It does not suppress the infant's respiration; there is little if any interference from the bowel; and there is excellent relaxation, facilitating technic. There is also the advantage that the mother sees and hears her infant at birth. It is our impression that most of the reported dangers can be avoided by using simple drugs and low dosage, and keeping the patient flat and supine.

Inhalation anesthesia is generally satisfactory if the induction is not prolonged and if the operator is facile in removing the infant so that it isn't narcotized too much by the anesthetic agent. The principal factor in using inhalation anesthesia is a qualified well trained anesthetist at the head of the table.

Local infiltration is the safest anesthesia barring idiosyncrasies to the drug since it doesn't affect the infant whatsoever, and heavy pre-medication is generally unnecessary. It is not attractive to many patients. The operator must be allowed sufficient time after injection of the drug to insure anesthesia, and he must be meticulous in handling tissues. Even under the best circumstances there is considerable patient discomfort caused by manipulation of the peritoneum and its contents.

Intravenous anesthesia is finding a place

in some areas. Those that use it a lot believe it quite satisfactory. Our own experience with it is extremely limited. When it is used the patient should be prepared and draped before the anesthetic is started, and the operator must be prepared to move quickly before the fetus receives much of the effect of the anesthetic agent.

Indications

Fetopelvic disproportion (49 per cent in our experience) was formerly the only valid indication for the operation. With normal presentation it is obvious that if the infant is too big or insufficiently molded, if the passages are too small, or the wrong shape for the particular fetus, or if the uterine contractions are insufficient to propel the fetus through the birth canal, cesarean section is the choice over difficult attempts at vaginal delivery. Despite the accuracy of roentgenologic determination of pelvic size and configuration, it is our firm belief that with few exceptions dystocia cannot be so accurately predetermined that elective primary cesarean section is indicated. In almost all instances it is not only possible but desirable to allow the onset of labor, preferably with ruptured membranes, before making a decision as to the necessity of operation. Dystocia by definition is abnormal labor, and we believe that it occurs when normal progress ceases or fails to occur. When this failure of progress occurs and evaluation is necessary, and if the considered judgment of the examiner indicates reasonable doubt of safe delivery by vaginal means, the cesarean section should be used.

Deflexion attitudes usually do not require abdominal delivery and generally can be managed vaginally in the absence of abnormal mensuration or configuration of the pelvis, or overly large infants. An occasional brow presentation particularly in a primigravida which has not been recognized in the early part of labor, may require operative delivery. Face presentations usually can be managed by the vaginal route unless dystocia other than that due to the deflexion is present.

Breeches are a special problem. It is our experience that because of subsequent damage to infants, even those that are born alive, cesarean section is the procedure of

choice in more instances than would be considered valid with other presentations.

About one-sixth of our incidence of fetopelvic disproportion are caused by breech presentation, and we feel that a cesarean section incidence in the neighborhood of 15 per cent to 20 per cent for primigravid breeches is defensible.

An even higher incidence of cesarean section is acceptable for transverse presentation. A full term infant in transverse presentation is a non-deliverable situation, and unless the conditions for changing the polarity of the infant by version are present, the only safe manner of delivering the infant is by operative means. It has been our experience that too frequently the discovery of this abnormal attitude occurs late in labor, compromising the infant beyond its ability to survive. It has also been our experience that attempts at version when the prerequisite conditions (i.e., full dilation of the cervix, relatively recent or even better non-rupture of the membranes and no disproportion), are not present have in too many instances caused rupture of the uterus. Even under ideal conditions the results of version are disappointing.

It is our feeling that if women with dystocia are handled properly there should be little or no fetal or maternity mortality.

The next large group (10 per cent) requiring cesarean section made up of those who have hemorrhages late in pregnancy. Even under the best of circumstances there will be occasional fetal deaths in this group, and unfortunately even a rare maternal death because of the catastrophic course that some of these complications sometimes pursue with the death of either the mother or the fetus before treatment can be instituted.

At the present time the treatment of placenta previa is fairly well standardized. In the presence of a central placenta previa, cesarean section is the only satisfactory treatment. In the marginal or lateral types, if rupture of the membranes and perhaps some stimulation with intravenous pitocin causes a cessation of the bleeding and satisfactory progress, vaginal delivery is allowed. In general we do not believe there is any other method of treating this condi-

tion. Hydrostatic bags, partial or incomplete versions, scalp traction, etc., we believe are archaic and time-consuming methods of treatment when too much time may cause loss of life. We do not believe it necessary always to make the diagnosis of third trimester bleeding. If a woman has abnormal bleeding which stops, and at the same time the uterus is non-irritable, the fetal heart is vigorous and steady, she can be observed closely for perhaps weeks before it is necessary to attempt making any diagnosis. This insures diminishing prematurity of the baby, and in a well protected environment offers no great risk to the mother. If examination is done immediately on women with premature babies in whom placenta previa is suspected, it often forces the operator to deliver the baby promptly because of hemorrhage starting anew from the manipulation necessary to establish the diagnosis. If there be small bouts of bleeding of no great amount at each instance, it is perfectly feasible to replace the maternal blood loss with transfusions until such time as the infant is certainly viable enough to avoid most of the risks of premature delivery.

Abruption of the placenta is generally an obstetric catastrophe resulting in high loss of fetal life due to the anoxia caused by the separation of the placenta. Our attitude is somewhat radical in regard to the complication, and we think that in most instances of severe abruptio the fetal outcome depends upon rapid delivery. Unless vaginal delivery can be predicted in a matter of a very few hours, we think it is justifiable to deliver the infant by cesarean section. Our experience in awaiting vaginal delivery in these cases has resulted in such a high rate of stillborn infants that we think it is justifiable to subject the mother to some added risk in the fetal interest. The mother is also protected from additional blood loss and the possible development of afibrinogenemia.

Rupture of the uterus is also a catastrophic complication, and there is no question concerning the propriety of immediate laparotomy. The infant often may be extruded in the abdominal cavity. If it is not, the uterine incision or opening must be enlarged to extract the child. Very frequently

the uterus must be sacrificed. There are occasional instances of rupture of previous cesarean section scars in which the scar simply splits open without damage to either the mother or the infant. In some cases the scars may be repaired without jeopardy to future pregnancies.

Toxemias of pregnancy account for 18 per cent of our cesarean sections. The only certain fact we know about the disease is that it is ameliorated by delivery of the infant. When treatment is unavailing and pre-eclampsia fulminating, particularly in primigravid women with uncertain outlook for vaginal delivery, we think the time element is of sufficient importance to subject some of such women to operative delivery. Once eclamptic convulsions are controlled in instances of eclampsia we think that within 12 to 24 hours delivery should be accomplished. If this is not feasible by the vaginal route, these women are also subjected to cesarean section.

Severe hypertensive cardiovascular disease is one of the most unsatisfactory complications of obstetrics to treat successfully. It becomes more unsatisfactory if complicated by preeclampsia. Frequently the fetus dies in utero before it has had sufficient gestation time to survive even if delivery were accomplished, and we think that at the earliest point of reasonably certain viability that the infant should be removed feeling that its chance in a premature nursery is better than being retained in utero. This may be accomplished by induction of labor if the conditions are satisfactory, but in instances of failure of induction we think that the infant should be delivered by cesarean section. In such instances the element of future pregnancies is usually not as pertinent to the performance of the primary section as it is in most other individuals since such patients generally are poor candidates for any pregnancy.

Diabetes is another unsatisfactory complication of pregnancy at the present time. Its treatment is quite varied and not as successful as we would like it to be. There is considerable controversy about the management of these women, and there are few clinics or institutions which see enough women with moderately severe or severe

diabetes to establish their own policies. Our impression at present is that the babies of diabetic mothers should be delivered somewhat before term. Whether this should be two weeks or four weeks or even six weeks we are not certain, and whether it is best to try to deliver these infants by the vaginal route or by cesarean section is also unclear. Our own experience has resulted in our use of cesarean operations in about 30 per cent of cases of diabetes that are other than mild.

Inertia, either primary or secondary, represents an indication in our hands for but a few cases of year of operative delivery. We think that inertia per se is an infrequent complication. We believe that there is almost always some other factor associated with the inertia; usually mild degrees of cephalopelvic disproportion or instances of uterine dyskinesia which are more responsible for the lack of progress than simple inertia. However, we do think that it is a contributory problem in about a third of the cases by dystocia. It is often overcome by judicious use of sedation or pitocin. There are not many instances in which we feel that a cesarean section for inertia alone is a legitimate operation.

Fetal distress accounts for six per cent of our cesarean sections. The diagnosis is dependent upon the evaluation of the fetal heart tones and the significance of meconium. It is a common experience that even in the presence of irregular, slow, or fast fetal heart tones with or without meconium, after delivery the cause of the fetal distress cannot be accurately established. Whenever fetal distress does occur, a careful vaginal examination is mandatory to determine the presence or absence of prolapse of the cord. If there is no such evidence, x-ray films should be taken to eliminate, so far as possible, the presence of fetal anomalies. If the cord is prolapsed, rapid cesarean section is usually the only safe way of producing a live infant unless the conditions for immediate vaginal delivery are present. During the time that the operating room is being readied the mother should be given oxygen and placed in the Trendelenburg position. If it is feasible an attendant should maintain the presenting part sufficiently out of the pelvic brim to prevent

compression of the already prolapsed cord. We have never been very successful in reposing such cords although in an occasional case it may be accomplished and further treatment therefor becomes unnecessary.

Previous cesarean section accounts for 35 per cent of our operations. Although our attitude is against the mere presence of a previous section scar as an indication, we find that multiple cesarean sections are not uncommonly encountered. Despite our attitude toward allowing a certain group of women with a primary cesarean section scar an opportunity to deliver vaginally in subsequent pregnancies, if such subsequent pregnancy does not result in vaginal delivery we do not think that any attempt at vaginal delivery is reasonable after two or more previous operations. We do feel very strongly that such women should be allowed to attain some evidence of the onset of labor before being operated on. This insures the fetus maximum safeguards against prematurity. We also think that a little labor tends to stimulate the baby and produce a more active and vigorous infant than those that are removed from a quiet amniotic sac without any labor.

Cervical amputations and conizations generally do not interfere with vaginal delivery, but occasional instances may cause sufficient scarring and fibrous reaction to make vaginal delivery dangerous. Colporrhaphies also occasionally make cesarean section necessary. After repair of genital fistulae caused by previous deliveries we think it good judgment to deliver such patients by cesarean section at the onset of labor.

Obstructive tumors are rare, but when they are present cesarean section is required because of mechanical obstruction. They are frequently overlooked when they arise in the ovaries since they may grow rapidly during pregnancy, and a woman with a small ovarian tumor on initial examination may surprise the obstetrician by having a tumor of much greater extent at term. The same attitudes in regard to fibroids, although initially myomas of the uterus rise sufficiently far out of the pelvis to obviate any obstruction.

Summary

A brief review of the cesarean operation is presented with comments upon incidence, morbidity, type of operation, anesthesia and indication.

The PORPHYRIAS

WILLIAM R. PASCHAL, M.D.

The porphyrins have come more and more into clinical prominence in recent years. We have progressed from Sherer's description in 1841 of a red pigment formed by the action of sulfuric acid on hemoglobin, through the revelation of its physical and chemical properties in 1871, and the recognition of the clinical entity of porphyria in 1911, to our present incomplete understanding of the nature of these substances.

At this time we have reached the point at which the clinical syndromes of the porphyrias are fairly well nosologically defined. However, our knowledge of the underlying pathologic physiology and biochemistry is still very inadequate.

The porphyrias are now generally classified into:

1. Congenital porphyria

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2. Acute intermittent porphyria
3. Cutaneo-hepatic porphyria
4. Mixed porphyria
5. Miscellaneous types:
 1. Myoporphyria

2. Asymptomatic idiopathic coproporphyria
3. Porphyrinorrhea
6. Secondary porphyrinurias

These types will be discussed subsequent to an outlining of the current status of our knowledge of the biochemistry of the syndromes. A more complete understanding of these clinical states is dependent upon a knowledge of the biochemistry of the porphyrins in health and disease. However, it should be reemphasized that this knowledge is quite limited at this time. An attempt to crystalize this complex and somewhat confusing information into only those facts which are essential to the clinician will be made in this presentation.

Porphyrins, in general, are pigments which are found throughout the plant and animal world. For example, actinoporphyrin is the basis of chlorophyll, and protoporphyrin is the basis of hemoglobin. Clinicians are, of course, primarily interested in the porphyrins found in vertebrates, and this discussion is therefore limited to those particular porphyrins. While porphyrins, in general, can combine with certain metals, such as copper, cobalt, nickel, silver, manganese, zinc, tin, iron and other metals, we are concerned primarily with the protoporphyrin-iron compound in the vertebrate called heme. While heme will combine with proteins of various types, we are specifically interested in the heme-globin combination to form hemoglobin, which is, therefore, an iron plus protoporphyrin plus globin compound. This metalloporphyrin-protein complex is only one of the series of hemochromogens. Porphyrin in similar combinations forms the basis of other respiratory pigments, also; for example, that of cytochrome and of catalase.

All porphyrins have in common four pyrrole groups as a basic chemical structure. Such a structure may be illustrated as follows:

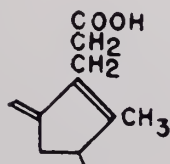
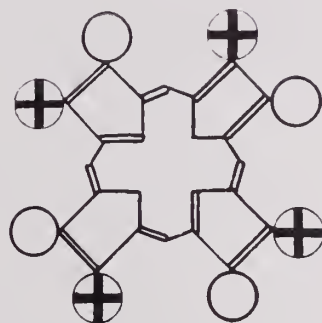


Figure 1

These four pyrrole groups are bound together by four additional carbon atoms, resulting in the following basic structure: (coproporphyrin I is used as an example):



COPROPORPHYRIN I

Figure 2

The varieties of porphyrins are distinguished by the position and presence of combinations of either methyl, acetic, or propionic groups attached to eight substitution points about this basic porphyrin nucleus. These substitution groups are all composed of carbon, hydrogen and oxygen atoms. In addition, these groups are so placed throughout the series of porphyrin compounds that each individual porphyrin has several stereoisomers (See Figure 3).

Porphyrin compounds in the human belong to two different groups. In the first group are those having four each of two different radicals in the eight substitution points around the porphyrin ring. Coproporphyrin and uroporphyrin are in this group. For example, it may be seen in Figure 2 that in the uroporphyrins the substitution groups are arranged so that four each of the acetic groups and four each of the propionic groups are present about the basic nucleus. On the other hand, in the coproporphyrins four each of the methyl groups and four each of the propionic groups are so placed. Four possible stereoisomers are present, and these isomers are designated as "types," and are numbered from I to IV. For example, examination of the diagram will reveal the differences in positions of the acetic and propionic groups in the isomers I and III of the uroporphyrin molecule. Only types I and III of the porphyrins are of interest in this discussion, since only they occur in nature. Types II and IV do

not occur naturally, but have been synthesized.

In the second group of more complex porphyrins found in the human three different radicals are present and are so arranged that four of one type and two each of the other radicals are present. Protoporphyrin is in this group.

For our purpose it is sufficient to state that all of the porphyrin compounds in the body represent various stages in a chain of compounds ranging from the relatively simple to the more complex, but all having the similar basic porphyrin ring structure. Of course, the question has arisen as to which compounds come first; that is, which porphyrins are precursors and which are synthetic products or breakdown molecules. Our interest in this chain is intensified when we find that several of these substances are excreted in the urine and feces in normal and pathologic states.

The present state of our knowledge regarding the relation of the porphyrins to each other and their derivation is somewhat incomplete. However, recent work with radioactive C^{14} has helped to bridge some gaps. Hence, it is believed that two molecules of a succinyl derivative condense to form a pyrrole, represented by porphobilinogen. Four of these molecules condense to uroporphyrin III, and this is then converted to coproporphyrin III and ultimately to pro-

toporphyrin 9, which is the porphyrin of blood pigment. Note that all of these compounds are of the type III isomer. Although the type I series occurs as a by-product of the type III series metabolism, a similar method of metabolism apparently takes place for this series. (See Figure 4.)

It is important to note that porphobilinogen, uroporphyrin and coproporphyrin, the substances with which we are most often concerned clinically as excretion substances in the urine and feces, are not excretion products of the "central" protoporphyrin but are actually precursors of this very important molecule.

Carrying the chain of reaction further, we see that protoporphyrin 9 combines with iron to form heme, which is the metalloporphyrin of the blood pigment. This further combines with the protein, globin, to form hemoglobin.

We have then a scheme whereby protoporphyrin is synthesized. However, little is known regarding the breakdown of this substance in the body. It is known that most of the protoporphyrin in hemoglobin is eventually in some way broken down and eliminated normally as bile pigment.

Since porphobilinogen, uroporphyrin and coproporphyrin are the compounds with which clinicians are concerned in diagnosis, it is worth noting that while porphobilinogen

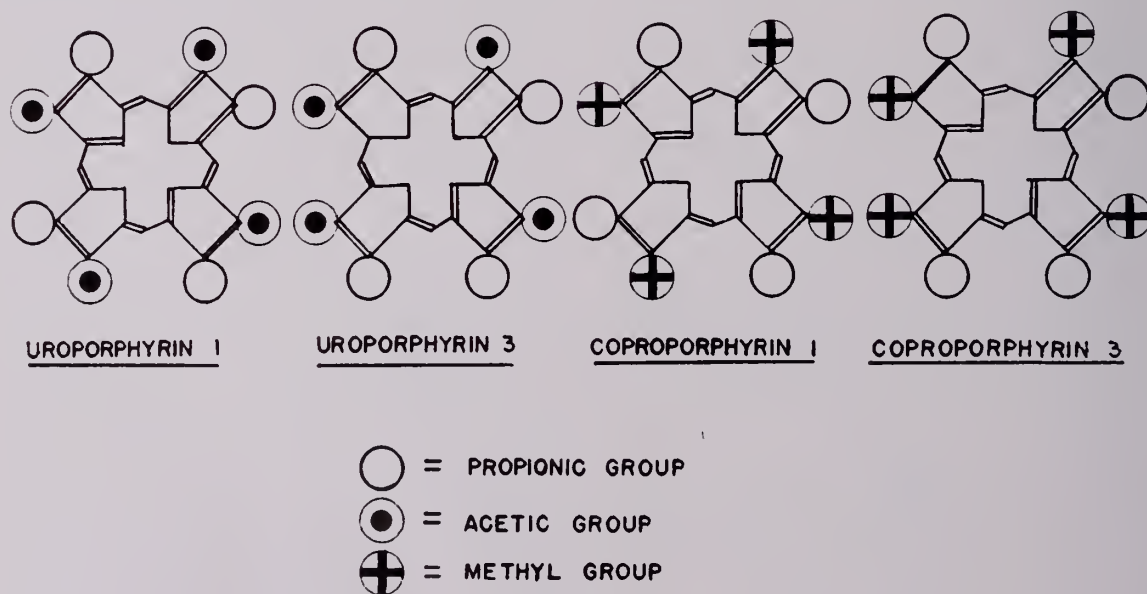


Figure 3

is not to be expected in normal urines or feces, the other two substances may be found normally in either feces or urine. For example, the type I isomer of coproporphyrin predominates over type III in the ratio of 4:1 in the excreta in normal state. This type I isomer apparently occurs as a by-product of hemoglobin synthesis, and this, along with small amounts of the type III isomer of coproporphyrin not utilized in hemoglobin synthesis is excreted by the liver in the bile, and eventually in the feces and urine. Some of these excreted porphyrins come from exogenous sources. In certain pathologic states the ratio of type I to type III may be reversed, and the quantity of one or both may be greatly increased. We know very little as to how or why these substances are so altered in pathologic states. In our subsequent discussion of the clinical types of porphyria, it will be evident that we do have some scant knowledge of the probable pathologic physiology.

With this basic understanding of the biochemistry of the porphyrins we may now proceed to the various types of porphyrias.

Congenital porphyria is a rare inborn error of metabolism, more common in males, which usually appears in early childhood. It may be due to a persistence of fetal pyrrole metabolism, and is inherited as a recessive trait. These patients continuously excrete large amounts of coproporphyrin I uroporphyrin I. It has been suggested that this disease results from a disturbance of pyrrole metabolism in the erythropoietic system, probably a disturbance of the enzyme systems within the developing red cells, so that abnormal porphyrins are produced which are not available for hemoglobin synthesis. These young red cells which contain such excessive amounts of the type I porphyrins are probably broken down, and the type I porphyrins are excreted in large amounts, while those of type III are converted ultimately to bile pigments. Thus, excessive hemolysis may be an important feature of congenital porphyria. Some of these patients exhibit splenomegaly, and it has been suggested that these patients with "porphyria erythropoietica" may be benefited by splenectomy. At least, splenectomy may result in a reduced rate of blood de-

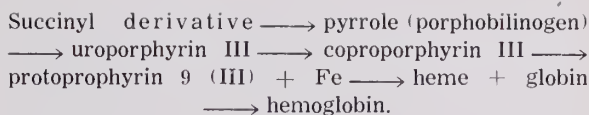


Figure 4

struction with a consequent reduced erythropoietic activity in the bone marrow, which has been previously hyperplastic.

Congenital Porphyria

Congenital porphyria is associated with brownish or pink discoloration of teeth and bones by uroporphyrin, and marked light sensitivity of the skin, which produces changes varying from erythema to large bullae on the exposed surface of the hands, arms, face and neck. When these heal, scars form which are often associated with brownish pigmentation. Hepatomegaly, splenomegaly, and hirsutism may develop. The urine varies in color from light red to even black, and, if it is kept acid and exposed to light, this discoloration is sometimes intensified. The porphyrins present in the urine may be separated and identified only by a detailed laboratory procedure consisting essentially of extraction and subsequently examination under ultraviolet light.

Acute Intermittent Porphyria

Acute intermittent porphyria is the most common and most dramatic of the porphyrias. It is probably a familial disease, having been found in large numbers of related South Africans. It is a Mendelian dominant characteristic.

Little is known of its pathologic physiology. In this and the mixed types of porphyria there seems to be an abnormality of porphyrin metabolism related to the liver, rather than to the erythropoietic system; hence the term "porphyria hepatica" has been applied to these types by Watson. Patients with this abnormality experience episodes of severe colicky abdominal pains and skeletal muscle spasm, with fever and sometimes leukocytosis, simulating an acute abdomen. Indeed, many of these patients have had several exploratory laparotomies before a diagnosis is finally made. The picture may be further complicated by jaundice. The nervous system is acutely affected during the acute attacks. Severe neuritic pains, with foot and wrist drop, flaccid ascending

paralysis of the lower extremities, ptosis of the lids, facial paralysis, diplopia, convulsions, and almost any other symptom may develop. Loss of deep tendon reflexes may occur. A peculiar hyperactivity of the ankle jerks with absent knee jerks may occur. Retrobulbar neuritis and hemorrhage near the discs with sparing of the macula may develop. Marked contraction of retinal vessels, transient blindness, and fixed, dilated or contracted pupils may occur. Transient hypertension may occur. The clinician should be aware that quite often the only early evidence of acute intermittent porphyria is constant pain in the extremities. Localized muscle weakness may accompany this.

It is not uncommon for the psychiatrist to make the diagnosis when called in consultation to see a patient exhibiting mental changes varying from simple neurosis or hysteria, to depression, or a manic-depressive or schizophrenic type of psychosis. Patients with this type of porphyria are often quite irritable and uncooperative. Photosensitivity is not present.

Episodes of this type of porphyria are at times precipitated by intake of such drugs as barbiturates, alcohol, sulfonal and veronal.

Coincident with these acute exacerbations large quantities of uroporphyrin, usually of the type III, are excreted, along with large amounts of coproporphyrin III and occasionally of coproporphyrin I.

The main feature and most specific diagnostic finding, however, is the presence of large quantities of porphobilinogen during the acute attacks. This is excreted only in the acute intermittent type as a colorless chromogen, which on standing in sunlight changes to porphobilin, giving the characteristic red and black urine. Porphobilinogen is revealed by the very simple Watson-Schwartz urine test in which Ehrlich's aldehyde reagent is added to the urine along with concentrated hydrochloric acid and sodium acetate. If a pink color develops, chloroform is added, and the persistence of the color in the aqueous layer indicates porphobilinogen. False positives are rare.

Other Types

Cutaneo-hepatic porphyria is character-

ized mainly by photosensitive skin, with vesicle formation, and occasionally the skin is also sensitive to trauma and heat. This is the "cutanea tardive" type as described by Brunsting. No visceral manifestations are present. In contrast to the congenital type, with which these are confused, this type seems to be associated with hepatic abnormalities rather than with erythropoietic changes. Porphobilinogen is not excreted, but there is variable urinary excretion of Uroporphyrin I and III. These cases run a prolonged course. The mixed porphyrias also are chronic, with skin manifestations, but with intermittent acute exacerbations of visceral symptoms as in the acute porphyrias with coincident output of porphobilinogen. In addition, Uroporphyrins I and Coproporphyrins I and III are excreted. These also seem to represent a hepatic type.

The miscellaneous types of porphyria are not well defined clinical entities and are as yet poorly understood. Asymptomatic idiopathic coproporphyria occurs rarely in otherwise normal individuals.

The secondary, or toxic, porphyrinurias are associated with increased excretion of coproporphyrins in the urine. This occurs, for example, in lead poisoning and in intoxication with other heavy metals. Presumably this occurs because the metal interferes with the incorporation of iron into the porphyrin molecule, thus resulting in the excretion of increased amounts of the precursor, coproporphyrin. Sulfonamides seem to act in a similar manner. Alcohol intake increases coproporphyrin III excretion, and in hypermetabolic states with fever coproporphyrin I is excreted in excess. In certain hematologic diseases coproporphyrinuria occurs. In the aplastic anemias the coproporphyrin is apparently not available for hemoglobin synthesis for some reason, and is therefore excreted in excess. In pernicious anemia in relapse, there is an apparent arrest of protoporphyrin synthesis with consequent increase in excretion of the precursor, coproporphyrin. Hepatic diseases such as carcinomatosis, hepatitis and cirrhosis are associated with increase mainly in excretion of type I coproporphyrin, and the normal biliary excretion is decreased with a consequent increase in urinary copro-

porphyrins. Other conditions associated with secondary coproporphyrinuria are Hodgkin's disease, hemochromatosis, leukemia, hemolytic anemias, pellagra, ariboflavinosis, thyrotoxicosis and melanosarcoma.

Latent porphyria should be mentioned only because it has been found in asymptomatic relatives of patients with the acute intermittent type.

Pathologic changes found in the porphyrias include degenerative changes in the nervous system; diffuse cloudy swelling and atrophy and central necrosis, with fatty degeneration and siderosis in the liver; diffuse cloudy swelling of tubular epithelium in the kidneys with atrophy, and glomerular degenerative changes. In the acute form, segments of dilated bowel are seen.

No successful treatment has been found for any of the porphyrias. Recently chlorpromazine has been found useful in controlling the pain and psychic symptoms in the acute forms. Vitamin B₁₂ has recently been used to alleviate photosensitivity in the cutaneous patients. Splenectomy has been of value in producing at least temporary remissions of the symptoms in the erythropoietic cases, and the associated hemolytic anemia is also lessened. Tetraethyl ammonium chloride relieves the acute pain at times in the acute intermittent type. Intravenous procaine is sometimes similarly helpful.

The diagnosis of the individual syndrome rests upon the extraction and subsequent ex-

amination under ultraviolet light, in the case of the coproporphyrins and uroporphyrins. Spectroscopic examination and paper chromatography are performed in the research laboratories. These and other refined techniques, however, are not necessary to the clinical diagnosis. The clinician needs to know that the coproporphyrins and uroporphyrins can be separated and identified as such in the well equipped hospital laboratory, and that the very simple Watson's test for porphobilinogen is specific for the acute intermittent types and for the mixed types.

Summary

A presentation of the basic chemistry and pathologic physiology of the porphyrias has been given, an attempt being made to stress aspects of interest to the clinician. These complex substances may be studied in the laboratory by several procedures. However, only those methods of interest to the clinician have been presented. There is much to be learned and as our knowledge progresses, it may be expected that it will lead into a more complete understanding of other diseases, since porphyrins are so basic to the respiratory enzymes in all living cells.

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Credit for Figures 1, 2, and 3 is given to the *New England Journal of Medicine*.

Second in a Series

STOP RHEUMATIC FEVER

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THE AUTHOR

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The theme of the column this month is the Epidemiology of Streptococcal Infections. Certainly, it is evident, as will be more clearly defined and elucidated upon succeeding columns, that fundamental to all patients with rheumatic fever and its serious sequel of rheumatic valvular heart disease is the preceding infection by the Lancefield Group A beta-hemolytic streptococcus. Since this is, in essence, the *sine qua non* for the still

mysterious steps leading to the development of the rheumatic state, it behooves us to take stock of our knowledge of the epidemi-

ology of streptococcal infections. Several excellent articles are to be found in the medical literature, and your specific attention is directed to them.^{1, 2, 3}

Epidemiology has been defined by Maxcy as the field of science dealing with the relationships of the various factors which determine the frequencies and distributions of an infectious process, a disease, or a physiological state in a human community. If we are to STOP RHEUMATIC FEVER, then we must be enlightened about the epidemiological factors and their interrelationships concerning streptococcal infections. Only through adequate knowledge of the biology of the beta-hemolytic streptococcus and its effects upon the biology of a human host can we begin to appreciate the need for control of this important infectious disease, not to mention the sequelae.

The streptococcus is ubiquitous and omnipresent twelve months of the year, hence the risk of rheumatic fever cannot be denied in any month or season. What are the risks of acquiring a streptococcal infection that may lead to rheumatic fever? It has been shown by Rammelkamp and his co-workers that if a volunteer subject is inoculated with a specific type streptococcus from infectious material of a patient, it is not possible to recover that organism from cultures of the tonsils and oropharynx during the first 32 hours following inoculation. Approximately 44 hours after inoculation of the volunteer the typical symptoms of sore throat begin to appear, but the streptococcus was cultured only a few hours before these symptoms were noted. Subsequently the number of organisms increased rapidly, and following this the classical signs of exudative pharyngitis appeared. Hence it would seem that in an individual not previously immunized by infection by a specific type streptococcus, the likelihood of infection following a fairly vigorous exposure is moderately certain. It must be remembered, however, that certain other epidemiological factors are operating too, and these will control the dose of inoculum that any given individual may receive. These latter considerations would include how early the diagnosis is made, and whether treatment and/or isolation of a case of streptococcal infection has been

achieved before too many members of the family circle or community could be exposed. The host is capable of handling a certain number of infectious particles, although here too it is to be noted that great variations in susceptibility to streptococcal infections exist in the population at large.

If one considers only the infected individual for a moment, what are the risks of this particular infection from a public health view-point? We have adequate data to suggest that untreated cases of streptococcal infection are followed by a rather high carrier rate. If one compares, for example, the normal carrier rate of a civil population to be from between 5 to 10 per cent of individuals carrying beta-hemolytic streptococci to that of a group of untreated individuals with streptococcal infections, who after about three weeks are still showing 60 to 95 per cent positive cultures for the streptococcus, it is evident that these latter individuals create a marked hazard to the populace and all efforts must be made to alter this epidemiological factor leading to further streptococcal infections and possible rheumatic fever.

The interrelationships of bacterial and host factors in the epidemiology of streptococcal infections are not well understood. Hamburger pointed out the great importance of those individuals who spread their streptococci by the nasal route. This correlated well with earlier work demonstrating that streptococcal infections were much more apt to occur in people exposed to patients with sinusitis or other suppurative complications. This would clearly emphasize the point made some years ago that the ability to spread infectious streptococcal particles to new hosts is definitely related to the number of streptococci harbored in various passages of the respiratory system. Quantitative studies done by Rammelkamp and his group showed that the risk to an individual exposed to a carrier harboring a large number of streptococci was approximately three times as great as the risk when the exposure was to a carrier whose culture showed less than 10 streptococci. It should be pointed out, however, that certain basic work has been done which indicates that perhaps during the convalescent carrier

status, there are certain biological changes occurring in the streptococcal organism itself. This can be host-induced, but it is also well known that the chronic carrier is less likely to transmit an infection than an acutely infected individual. The latter observation, of course, may be entirely related to the number of streptococci present for transmission.

A facet of epidemiological investigation that has received considerable attention is the high incidence of streptococcal infections in certain locales and during certain seasons. It should be reiterated, however, in passing that all climates in all areas are subject to streptococcal infections twelve months a year. The reasons for these variations have been at least partially attributed to the fact that in certain colder climates, there is greater indoor crowding and hence more opportunity for intimate contact with infected members of the family or friends. Possibly, too, there are climatic effects on the streptococcus itself that have not been adequately explained. It is well to be aware of the problem in one's own locale, so that alert and intelligent physicians may institute appropriate measures to STOP RHEUMATIC FEVER if there seems to be some deviation from normal incidence of streptococcal infections. To this end, of course, all physicians are morally bound to report diligently to their State Health Departments all cases of streptococcal disease which they see, in order that proper authorities may better act as watchdogs over an impending epidemic that would surely result in an increased incidence of rheumatic fever.

The role of the environmental deposits of streptococci is yet to be completely understood. Certain studies, mainly in military populations, have suggested that during epidemics of streptococcal infections, the reservoirs of floor dust, clothing, bedding, blankets, and other articles might be a source of continuing infection. While certain of these data are quite suggestive, there are others who think that they are quite circumstantial. It is true, however, that measures directed

at controlling the environmental deposits of streptococci, while perhaps somewhat successful bacteriologically in suppressing the streptococcal colony counts, were never completely successful in aborting epidemics of streptococcal infections. Hence it would appear that in the epidemiology of streptococcal infections, the human reservoir and its various modes of transmission must be considered as the prime area of attack.

In summary, then, it is to be remembered that most individuals of all age groups are susceptible to streptococcal infections. Certain younger age groups and those with previous rheumatic fever appear to be more susceptible. The likelihood of infection appears related to the intimacy of contact, to the number of organisms that are acquired and by which route acquired. The astoundingly high per cent of individuals who remain as carriers following untreated streptococcal infections, with the consequent public health risk, strongly mitigates for the early diagnosis and treatment of these patients. Attention must be given to the fact that streptococcal infections occur in all climates and all areas twelve months of the year, and hence if we are to STOP RHEUMATIC FEVER, we must focus constantly on the early recognition of streptococcal infections. Finally, since the environmental deposits of infectious particles do not appear to play a major role in the epidemiology of streptococcal infections, all the more effort must be expended upon the human reservoirs, treating the sick, sorting out and often treating the contacts, giving prophylaxis, and taking all possible measures to STOP RHEUMATIC FEVER.

This is the second in a series of articles prepared for the Journal in cooperation with the Oklahoma State Heart Association.

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Special Articles

University of Oklahoma

SPEECH and HEARING CLINIC

JOHN W. KEYS, Ph.D.

Developmental History

In October 1947, almost ten years ago, a new outpatient clinic in the Crippled Children's Hospital in Oklahoma City began offering its services to the men, women and children of the State of Oklahoma. This in itself, was not unique since other clinics in the hospital had come into being at previous dates with no particular birth pains and little fanfare. This clinic was different, however, in that its staff was made up of non-medical personnel and its concern was with the patient after his medical needs, if any, had been cared for.

No one doubted the need for such a clinic since it was completely obvious to all that there were many patients who could not be restored to productivity, or social usefulness through medical treatment alone. Further therapy of a different type was needed. The palate of a child with a complete cleft could be surgically repaired, yet his speech might remain so inadequate that his whole personality structure would be warped. Suppurative ears could be treated medically or by operative techniques and yet in many instances the hearing loss remained to retard the child's development. Brain damage could be diagnosed by the pediatrician and the neurologist but there was no medical cure. Many of these patients, however, could receive substantial benefit from other types of therapy and in fact for many, this type of therapy was their only hope.

A decade ago, however, these so called paramedical therapies were not generally found in hospitals throughout the country, and there was considerable doubt on the part of many in the medical profession that such a clinic as the one proposed for the treatment of speech and hearing disorders had any real function in a hospital at all.

EDITOR'S NOTE

This clinic represents another aspect of teaching and service offered by the University of Oklahoma's Medical Center. The story of its development is told here by its director, Dr. John W. Keys.

Deafness in a child is discovered early in his life. It is not always so in the case of a child with hearing loss. The clinic has agreed to furnish *The Journal* with case studies representing various types and degrees of hearing loss so that the profession can learn to recognize clues and signs of hearing loss as early in life as remedial measures are possible.

Too, space then, as it still is, was at a premium and many of those concerned felt that the rooms proposed for the use of the clinic could be more profitably utilized in other ways. These views were expressed in a completely sincere and honest manner and are mentioned here only to demonstrate the fact that the inception of the new clinic in the hospital was not completely and unanimously acclaimed as a forward step.

It may be mentioned in passing, that today almost every large medical center in the nation, including such hospitals as Mayos, Johns Hopkins, Washington University Medical School, Northwestern University Hospital and many others has such a clinic. Oklahoma University was one of the first in the country.

In the discussions that continued over a period of several months, three facts continued to emerge over and over. First, the type of services to be offered by the clinic were vitally needed by such agencies as the Crippled Children's Commission, Vocational Rehabilitation and the Veterans Administration, by doctors, schools, and parents. Secondly, no other institution at that time or in the foreseeable future, was in a position to offer such services on the scale need-

ed. Thirdly, such a clinic should be under the general supervision of the Department of Otolaryngology and its works should be done in close cooperation with other medical disciplines in the hospital.

To meet these immediate needs, the School of Medicine provided five thousand dollars and Rotary International gave three thousand dollars. Remodeling began in a 1200 square foot area in the basement of the Crippled Children's Hospital in preparation of the University of Oklahoma Speech and Hearing Clinic. Another grant of twenty-five thousand dollars by the Children's Bureau of Washington, D.C. administered through the Commission for Crippled Children made possible the purchase of needed equipment.

The clinic began its work with a staff of five persons, an audiologist, a speech therapist, a teacher of the deaf, an electrical engineer, and a director. Five little deaf children, aged three, sat in small wooden chairs round their teacher ready to receive their first lessons and to start on the long and sometimes mystifying road of learning how to speak.

As has been stated, all of this happened almost ten years ago. This month, the Speech and Hearing Clinic will move into a new one hundred-ninety-three thousand dollar building on the Medical School campus with a staff of seven teachers of the deaf, three speech therapists, an audiologist, a social worker, three secretaries, and a director. Forty deaf children aged three to 13, occupy six new modern classrooms while an additional fifty or sixty children with speech problems are receiving therapy in other clinical rooms in the new building.

The building itself, modern in design, occupies a space of approximately 8000 square feet. In addition to the six classrooms for the deaf, there are two large speech therapy rooms, eight offices, three of which are combination office and speech therapy rooms, two large conference rooms, and three complete audiological test units. Each test unit is composed of a control room in which the testing equipment and the observer are located and the test room in which the patient is seated. The walls of these rooms

are approximately twenty-eight inches thick and are constructed of solid concrete, hollow tile, and plaster with sound absorbent material covered with perforated transite forming the innermost portion of the wall structure. The test room in which the patient is tested is literally a room within a room since it is at no point in actual contact with the outside wall of the test unit.

A very large room in the basement adds an additional 1000 square feet to the useable space in the building. This room is completely equipped with kitchenette facilities which made it possible to provide hot lunches for the children. The room is also used for handcraft and play activities as well as a meeting place for the school's parent-teacher group.

It is obvious that the development of the new building was not accidental. Over the years the clinic continued to grow and develop as the need for its services increased. A wooden army barracks was purchased by the University and the Oklahoma Society for Crippled Children, and it became the home of the School for the Deaf. Other rooms were added as the patient load increased until the clinic was operating in three different buildings on the campus. It became evident that new quarters would have to be found in which the clinic could be housed, but where, and who would furnish the money for these quarters?

The answer to these questions covers a period of approximately five years and is too long to include here. Suffice to say that the members of the Oklahoma City Junior League became interested in the solution to the problems and accomplished what seemed at first to be the impossible task of raising approximately \$85,000 for a new building. It can be said to their credit that the task was completed in the face of considerable adversity, and it was only through their determination, perseverance and effort that the goal was finally achieved. Other civic groups such as the Quota Club, the Exchange Club, Variety Club, Kappa Kappa Gamma and the parent teacher group of the Deaf School along with a large number of private donors contributed toward the building or equipment fund. This money totaling over \$100,000 was matched by Hill-

Burton federal funds from the Department of Vocational Rehabilitation.

Purposes of the Clinic

Four general purposes are served by the University of Oklahoma Speech and Hearing Clinic: (1) Speech and Audiological services, both diagnostic and therapeutic, are offered to the people of the State of Oklahoma and in some instances to individuals from other states. (2) The clinic provides an essential laboratory for the training of teachers of the deaf, speech therapists, and clinical audiologists. (3) Counsel and guidance are offered parents of children with speech and hearing handicaps. (4) Unusual opportunities for research are provided by the clinics.

Whom the Clinic Serves

Approximately eleven hundred outpatients will be seen in the clinic this year. In addition, some eighty to one hundred children are receiving training of an educational or therapeutic nature in the clinic each week. These patients come from all over the State of Oklahoma and are referred by physicians, public health nurses, public school speech therapists and other outpatient clinics in the hospital.

The clinic holds service contracts with Vocational Rehabilitation, Crippled Children's Commission and Veterans Administration. Thus, most of Vocational Rehabilitation's hard of hearing patients and all veterans eligible for new hearing aids through the Veterans Administration receive hearing-aid evaluations in the clinic. Under the nationally authorized review program conducted by the Veterans Administration, some eight hundred veterans from this state will receive assessment of social efficiency examinations in the clinic during the next three to four year period.

A sizeable portion of the patient load consists of private patients, both children and adults.

Clinic Services

The clinic offers the following services:

1. Hearing evaluations and hearing aid evaluations for children and adults.
2. Classes for deaf children.
3. Auditory training and speech reading for

the hard of hearing.

4. Speech (outpatient) examinations.
5. Individual and/or group instruction of all types of speech disorders.

The School for Deaf Children

The School for the Deaf is an integral and functional part of the clinic. Here some forty deaf children, ranging in ages from two and one-half to thirteen years, attend classes daily, where they not only receive speech training, auditory training, and lip reading but an elementary school education as well. The oral method of instruction is used exclusively in the classrooms and on the playground.

Nursery and kindergarten groups attend only for a half day. Those of school age come for a full day, not only for the therapies mentioned above, but also for regular elementary school subjects.

During the summer months hard of hearing children from all over the state are brought to the clinic for remedial training. Each child is given a hearing evaluation and fitted with a hearing aid, if it is indicated.

The number of children who can be accepted for enrollment in the school is limited for three principal reasons. From the University's point of view, the school serves as a laboratory for training teachers of the deaf. At least six elementary school levels must be represented in the training program, to give the student in training adequate experience in teaching children of various age groups and at different grade levels. Any expansion beyond this criterion is perhaps unwarranted for teacher training purposes.

The new building provides only six classrooms for deaf children and since not more than six or seven children can be taught adequately in each room the upper limit of enrollment in the school is approximately forty students.

Operating a school for the deaf is an expensive proposition. Because of the need for individual instruction in working with deaf children, the classes, as was just mentioned, must be very small. It costs over five times as much to educate a deaf child for one year as it does a normal hearing child.

Speech Therapy

A sizeable number of the patients seen in the clinic each year are very young children who for one reason or another have failed to develop speech. Children who are not talking by the time they reach three years of age deserve and are in the need of some expert attention by specialists. This type of specialized help is the business of the speech therapy section of the clinic.

Delayed speech may be caused by one or more of five specific reasons: (1) mental retardation; (2) physical anomalies such as cleft palate or early illnesses; (3) hearing loss; (4) brain damage; (5) psychological disturbances. These are problems which children do not "simply outgrow."

Differential diagnosis at this early age is not always a simple matter. Not only is this the problem of the speech therapist but it is also the concern of the pediatrician, the psychologist and many times the neurologist. Ideally, patients are studied by such a group of specialists acting as a clinical team.

By far the greatest number of youngsters coming to the clinic for help are those with articulation problems. Omissions and/or substitutions of speech sounds are a common problem with very young children and as they grow older some of them need special help and guidance to overcome their problem. Therapy is not limited to these children but also extends to the parents who in some instances are heavy contributors to the child's problem.

Children usually attend therapy sessions two or three times a week for half or full hour periods depending on the age and needs of the child. Both individual and group instruction are available and this too is determined by the clinical needs of the patient.

Speech therapy is also available for both children and adults who have voice problems, stutterers, for aphasics, and for those with cleft palate speech. Esophageal speech is taught to laryngectomized patients.

Clinical Audiology

Some eight hundred and fifty patients will be seen this year in the audiology section of the clinic. These patients range in age from two to eighty years. They come to

the clinic for a variety of reasons. Parents of children of three who want to know if the child's failure to talk is caused by a hearing loss; school children are referred because of a suspected hearing loss when they are doing poorly in school or are disciplinary problems in the classroom; patients of all ages wish to determine the amount of their hearing loss and whether a hearing aid would be beneficial; other persons are referred by otologists who wish to determine the eligibility of the patient for the mobilization or fenestration operation.

The clinic has the latest and most up-to-date equipment available for evaluating hearing loss. PGSR (psycho galvanometric skin response) testing is employed primarily with adults although some testing is done on children. A loaner stock of the latest model hearing aids is also available for use in hearing-aid evaluation. Special tests such as loudness balance, signal to noise tests and others are performed where indicated.

Admission to the Clinic

In general, there are only two ways by which a patient may be admitted to the Speech and Hearing clinic. He may be referred by one of the agencies with whom clinic has a service contract or he may be admitted as a private patient. The clinic does receive a limited number of referrals from other outpatient clinics in the hospital.

Although fees are charged those who can afford to pay, it is intended that no child in the state of Oklahoma be denied a speech or hearing examination for financial reasons. Parents who are unable to pay the regular outpatient fees may make application to the Oklahoma Commission for Crippled Children for such an examination. In a similar manner, adults who meet the criteria of eligibility by Vocational Rehabilitation are accepted as referrals from that agency.

The State Hearing Program

Hearing services are not confined entirely to the clinic. A traveling consultant in audiology, employed by the Commission for Crippled Children and working through the State Department of Public Health is also a member of the clinic staff. His responsibility is that of conducting a statewide hear-

ing program. During the past five years over 95,000 children in the public schools of the state have received hearing tests. Of this number three per cent were found to have hearing losses of varying degrees of severity. The merit of this program, of course, rests in the fact that a timely medical intervention can, in some instances restore a child's hearing to within normal limits, or at least prevent it from deteriorating further. In those instances where irreparable damage has already occurred to the ear and medical treatment cannot improve the situation, speech reading, auditory training and a hearing aid may very well allow the child to make normal progress in school and social situations. Were such a child to remain undiscovered, as was the case in many instances before such testing programs began, he would quite likely continue to be or at least develop into a social misfit, a retarded and seriously misunderstood youngster.

The Teacher Training Program

The University offers a complete curriculum of training for prospective teachers of the deaf, clinical audiologists, and speech therapists. All degrees are conferred through the Speech Department in the College of Arts and Sciences of the University. At present there are approximately forty majors in speech and hearing in various stages of training. These students do some of their course work and most of their clinical practice in the clinic. The University offers the Bachelors, Masters and Ph.D. degrees in these areas.

The Staff

Fourteen full time people comprise the clinic staff—a clinical supervisor of Speech Therapy and two therapists; a supervisor of teacher training in the school for the deaf and six teachers of the deaf; two clinical audiologists; a social worker, and the director.

In addition to the clinical staff in Oklahoma City, two professors are employed on

the Norman campus to offer the basic and advanced non-clinical courses in Speech Therapy to the University students in training.

What of the Future

The speech and hearing program in the State of Oklahoma has just fairly gotten underway. The new facilities at the University of Oklahoma will allow for some increase in services to the people of the state, but not to the extent needed to satisfy the demand. Thousands of children need help with their speech and hearing problems and as yet that help is not forthcoming. Undoubtedly the greatest function which the University can play in alleviating this situation is through its training program, both at the undergraduate and graduate levels. The speech and hearing clinic offers a superior laboratory for obtaining clinical experience in that training program.

Another part of the total program which must be expanded falls under the heading of research in both speech and hearing. A great deal, in fact nearly all, of the recent advancements in clinical audiology have come from University experimental laboratories of one kind or another. There seems every reason to believe that with the increased and improved facilities for clinic operations that there will be additional opportunities in the field of research.

No educational program whether clinical or otherwise, of course, can advance beyond the level of the abilities and capabilities of the people who make up the staff. Because of the tremendous scarcity of qualified and competent people in all areas of speech and hearing, it becomes increasingly difficult to compete with other institutions for the services of these people. The clinic is fortunate in its present staff. Any prognosis of success for the clinic in the future must be qualified by or limited to the degree to which financial support for the clinic can be maintained or increased in order to maintain that staff.

PRESSURE GROUPS IN HEALTH

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Oklahoma Blue Cross and Blue Shield

You as an individual are perhaps not conscious of your participation in the development of health services in this country. But if you are a veteran, a member of a labor organization, a member of the armed forces, a dependent of one, or a recipient of public welfare funds, a person who works with health matters in any field, a member of a pre-payment Plan, or a taxpayer you are a participant in one of the greatest social developments in our country today.

Federal control of medicine in the United States is *not* a forgotten issue. It is entirely possible that within the next four to eight years definite action will be taken to bring the providers of health care under more drastic regulations of the Federal Government. This action will be taken by those responsible in government as a result of a demand from the people, for this is something that the people have been unable to solve for themselves.

This action is, today, being formulated as a result of great pressure groups presenting divergent demand for the removal of economic problems of health. The numbers of people in these pressure groups are so great that their influence is felt by someone in all most every family in our country. When we can get a glimpse of these forces, we can more readily understand why the economics of health has been a major issue in the last three presidential elections.

These great forces have already developed to the point that only one alternative is apparent to help curb the development of such control. The people in local communities throughout the nation must join forces with the medical and hospital professions in an all-out voluntary effort to solve these economic problems or be ready to face the coming problems of governmentally controlled medical care.

These three important publics must arrive at a positive, harmonious agreement on the best—and quickest—way to cope with the problems of health care expenses without government control.

Meeting the desires of the people of our country for an adequate health care program is considerably more involved than simply following the principles that govern insurance. For example, health care has always been a local community concern with the neighbors and friends working as a team in developing solutions to their mutual problems.

In the rough and tumble formative days of Oklahoma, about the only health service available was that provided by the family physician. It was not uncommon for patients to be brought many miles by buckboard or flatbed wagon to receive the loving care of a good physician. In many instances, the patients were too ill to be allowed to go home. The doctor found himself and his family sleeping on the floor and his patients in the beds. Ultimately, the home of the physician became the local hospital.

Gradually, the people became conscious of their responsibilities in providing health care needs and relieving the family physician of the financial burden of providing health care needs and relieving the family physician of the financial burden of providing hospital care. As a result, the local community hospital came into being.

Many remember the tragic days of the 1930's. The problems of financing health care facilities became greater and greater as hospital after hospital faced closing their doors in bankruptcy. But it was out of these circumstances that the communities began searching for solutions to their problems of financing adequate health care—at a cost they could afford. The necessity for immediate action created the overwhelming desire for a solution to their problems.

As is always the case when free men begin to create new ideas for the solution to their problems, there is always a counterpart in government control. This control examines the solution to see if it is something the people cannot do for themselves.

Speaking of a paternal government, it is amazing to see the speed with which people

attempt to forget their near crises and the rapidity with which they shift responsibility. Today, we visit with a great many physicians, hospital administrators, and businessmen. When the words "socialized medicine," "federal medicine," or "governmental medicine" is mentioned, they seem to permit their minds to run under the shelter of that "I don't want to have to think about it" attitude, and then laughingly say, "Oh, socialized medicine died with the Roosevelt Administration."

Socialized, federal, or governmental medicine did not die with the Roosevelt Administration. To the contrary, the idea was borne by the social planners, Oscar Ewing, Arthur Altmeir, Isador Faulk, and Senators Wagner, Murray, and Dingle. The trends of the Congress of those days were that of social reform, and it is nothing short of a miracle that they did not "rubber stamp" a program into being.

In reviewing the sequence of events, it becomes apparent that there were only three reasons why a federal health care program was not passed during the Roosevelt Administration:

1. The new voluntary experiment known as Blue Cross was able to show certain members of Congress the amazing results of early experiments in enrolling people in a voluntary program.
2. The Administration became involved in organizing and financing a world conflict, so there was neither manpower, time, nor finances for the experiments necessary.
3. The last and most important reason is that the social planners did not have a specific and workable program—because there had not been adequate experimentation.

Since that time the federal government has been more or less preoccupied with foreign affairs to the extent that it has not returned to its former mental attitude of financing health care and meeting the demands of the people. The people, on the other hand, have been slipping under the blanket of the higher and higher incomes of the present day economy.

In the intervening years, however, there have been many experiments going on. Some

are a result of voluntary efforts and some are in government, and some of them are serving as a creeping paralysis to remove the control of medical practice from the private practicing physician, the local community hospital, and the local citizen. Some of the approaches that have been developed are summarized here:

Group Practice

Private Group Clinics

Group practice falls into many categories which may be organized by a group of private practicing physicians who join together to establish a group clinic. They offer their services to the general public on a pre-payment basis. For example, the people of the surrounding community may pay a certain amount each month for what they may need in the future. When care is needed, they merely go to the clinic and any one of the physicians in the private group may serve and treat the patient. There are more than one-half million persons subscribing to private group clinics.

Consumer Cooperative Groups

These associations are usually managed by non-professional boards of trustees who employ physicians to provide care for their members. They sell the service of the physicians to all the people in the community who want medical care on a prepaid group basis. Membership in this type of organization now exceeds a million members in the United States. These organizations work to the exclusion of the private practicing physician.

State Group Medicine

Another type of group practice is that similar to the Health Insurance Plan of New York (HIP). This plan is an independent, non-profit health insurance program originally established for the municipal employees of New York City. It provides complete medical, hospital, clinic, and home medical and nursing care to its members. HIP found it could not handle the hospitalization portion of this coverage, since it owned no hospital facilities of its own. Ultimately, it turned this portion of the coverage over to the Blue Cross Plan of New York City. However, HIP still operates as a group practice.

Industrial Group Practice

Another new and unique prepayment group practice organization was founded during the second World War by Henry J. Kaiser, the industrialist, to provide complete hospital and medical care for employees working in his plants. This program is commonly known as the "Permanente" Foundation. In 1946, the program was made available to the general public on the usual prepayment basis. Medical and surgical services were made available by the Foundation. Hospitalization is supplied by the Foundation's hospitals. These hospitals are for the use of its members exclusively. Although the members receive comprehensive health care, they are not privileged to select the physician attending them. This group practice organization also works to the exclusion of the privately practicing physician.

Labor Union Group Practice

Many have read a great deal about the hospital medical program designed by John L. Lewis and the Coal Miners' Organization. This is only one of several different Labor Union Group Practice programs which have been established.

Labor Union Group Practice for hospital and medical care is ordinarily established by the officers of the union—using welfare funds to build hospitals, clinics, hire staffs and physicians to provide medical and hospital care to members of the union. Occasionally, this is expanded to permit others residing in the community to participate.

But it is important to note that the majority of the millions of organized labor have obtained coverage provided under the voluntary prepayment programs. This is especially true in the major industries of steel, automobile, communications, and transportation. It is also significant to note at this point that the majority of the voluntary prepayment medical Blue Shield Plans sponsored by local medical societies (having some 39 million members) were organized under the premise of service rather than dollar indemnity contracts.

In this program, the physicians enter into contracts with the subscribing public through the Blue Shield Program for the payment of a specified fee in full payment

for their services rendered, providing the annual income of the individual or family is under a certain income level. These vary from state to state and, in some instances, there may be two or more income limits in each Plan. This type of service plan is similar to that adopted under the Medicare Program for the Dependents of Servicemen.

There has been a growing unrest on the part of organized labor because there are some states in which the service contract has not yet been established. In the areas where the service contract has been established, the income limits have been placed so low that they are of little value to their members. This resentment has continued to grow to the point that one can read almost daily in newspapers and labor publications of the growing demand for the availability of more and more medical care on a service contract basis.

Excerpts from two of the more recent articles point this out:

24 "BETTER' HEALTH INSURANCE PLANS GOAL OF UNION HEADS, LABOR NEWSPAPER DECLARES:" "At the recent annual meeting of the American Public Health Association, James Brindle, Director of the United Auto Workers' Social Security Department, noted that although labor unions differ on details of how medical care ought to be provided and financed, most of them have supported legislation to establish a national health insurance program.

"Since Congress has not enacted this legislation, all unions, because of their health and welfare funds gained through collective bargaining, have the task of making the best use of the dollars set aside for medical care.

"Labor has used these dollars to purchase mostly hospitalization coverage and surgical benefits from Blue Cross, Blue Shield, and commercial carriers. Some plans include home and office care but these are rare. In about fifty instances, labor groups have established direct service medical centers where services are actually provided rather than the cash indemnities to cover part of the costs.

"The latter type of plan has proven more popular with members because there are no

barriers to the service, preventive services are usually included in the benefits, and there are no hidden bills cropping up after the services are rendered.

"Health insurance in the last twenty years has had a phenomenal growth, mostly as a result of collective bargaining. Unfortunately, even at this date, the extent to which commonly available insurance programs meet a family's health needs is not very impressive to labor.

"Among the causes for difficulties is the system of indemnity payments for physicians' services which is not a satisfactory method of paying for services and is a basis upon which some physicians too frequently add substantial charges. Also, the emphasis on hospitalization and surgical coverage, as in the case of most plans without substantial out-patient benefits, is frequently a cause for unnecessary hospitalization.

"Also as a result of inadequate concern for operating efficiency in hospitals and an unwillingness to enforce legitimate controls, there are unjustified premium increases.

"Labor is beginning to focus more on the following objectives: (1) Complete pre-payment for medical care without co-insurance, deductible features, and hidden added costs. (2) Comprehensive benefits—only if the range of health services is complete will the individual's health needs be effectively and economically met. (3) Rational organization of medical services—on the basis of group practice, and (4) control of the quality of medical services which must be built into medical care plans."

We quote from the second article:

³"LABOR GRATEFUL TO SOME MD'S, AFL'S MEANY SAYS. George Meany, President of AFL-CIO, dedicated organized labor's new Medical Center Plan in Philadelphia on Saturday. Members of 28 union locals will be eligible for medical services at the center. In his prepared speech, Meany praised cooperation of participating doctors. 'We are fortunate that, despite the negative attitude of certain medical organizations, there are many doctors such as those who staff this center who are governed by the highest ideals of their profession, who sincerely want to find a way to bring better

health care to more people, and who want to be part of a system that will enable them to practice the best medicine of which they are capable,' the speaker said."

One only begins to understand the significance of the attitudes being expressed when it is realized there are about 18 million members of organized labor. When the dependents are considered, it is found that there are some 55 million people represented. Also, that organized labor has at its disposal some 40 billion dollars in welfare funds to support its program. This 40 billion dollars is several billion more than has presently been accumulated in the Social Security funds by every working person since 1932.

Consumer Cooperative Group Practice

In 1946, representatives of the various consumer cooperative groups consummated the organization known as Cooperative Health Federation of America. By 1950, about 80 Consumer sponsored programs were in existence with members in more than half of the United States. To date, they have slightly in excess of one million members participating in this type of program. Again, the purpose was to maintain hospitals and hire physicians on a salary basis to provide care for their members, to the exclusion of community hospitals and private practicing physicians.

It is important to note that the establishment of group practice creates many new problems. The primary problem is that the patient can only receive care in the local group practice organization. It is of no value to him if illness strikes while he is away from his local community. Also of concern is that it will ultimately defeat the private practice of medicine as it has been known in this country.

The Voluntary Effort of the People-Physician-Hospital Trustees

One of the greatest ideas created in the minds of free men and the one that has had the greatest impact on the mass of population was the idea that came from the mind of the late Justin Kimball, M.D. Doctor Kimball was Administrator of Baylor Hospital, Dallas, Texas. In cooperation with school teachers in his community, he cre-

ated a Plan whereby the teachers would set aside a small sum of money each month. The funds were used to pay for the health care needs of these teachers.

In the late 1930's, a group of interested hospital, medical, and public leaders asked the insurance industry to sit down and discuss the problem. The representatives of the insurance industry could give no aid or comfort to these economic problems of the hospitals, as health care was considered by most of the leaders of the insurance industry as not coming in the scope of insurance.

During the intervening years, the leadership of hospitals, physicians, and other health agencies have come to realize more than ever that health services cannot be considered as insurance. These early discussions met with a great deal of interest. Especially interested were the leaders of industry, Chambers of Commerce, farm organizations, leaders of organized labor, trustees of hospitals, and physicians.

The interest of these people was so great that the Rosenwald Foundation made a grant of \$25,000, and Rufus Rorem, a young certified public accountant, was selected to conduct a survey to determine the interest and possibility of organizing a non-profit prepayment health care program in the local communities. The program would be directed by representatives of the public, hospitals, and physicians in order that they might mutually arrive at the solution of financing health care.

Early discussions in the conventions of the American Medical Association and the American Hospital Association brought the idea to the local level of the state and county medical and hospital associations, and through the current magazines into the homes of individuals.

In Oklahoma, the citizens became vitally interested in the solution of health care problems. In the same manner, hospital trustees and physicians began to formulate their own plans for the organization of a prepayment program. Among these early prepayment pioneers in Oklahoma were many "grand old men" of medicine.

During 1938 and 1939, there were very few hospitals in Oklahoma since the develop-

ment of the community hospitals was yet to come. However, those that existed were vitally interested.

From the discussions of a few dedicated people, representing the public, hospitals, and physicians, an organization named Group Hospital Service was incorporated April 1, 1940, under the laws of the State of Oklahoma. By the middle of 1940, this organization had met the standards required by the American Hospital Association to serve as a local Blue Cross Plan.

Since those early days, so much has been accomplished in Oklahoma that it would be impossible to relate all the achievements. However, a few of the most outstanding achievements should be mentioned.

In 1940, there were only 6,000 hospital beds which represented 2.61 beds per 1,000 persons of the population. By 1955, there were 7,000 beds; moreover, there are 1,500 beds under construction, which will make a total of 8,500 beds or 3.65 beds per 1,000 persons.

Today, there are non-profit community hospitals in about every community. There are 146 participating Blue Cross hospitals in Oklahoma. This great development in the availability of care has been made possible to a great extent by the stabilization of finances received by the hospitals through their contracts with the Blue Cross Plan. Today, approximately 20 per cent of the total hospital income is obtained from the people of Oklahoma through their organization, Blue Cross.

The terrible financial burden of hospital and surgical-medical care has been eliminated for a great number of Oklahomans. The cost of this care, which the people of the state has been spared, amounts to \$61,345,-955. (This amount was paid by Blue Cross and Blue Shield since their beginning through the year 1956.)

In 1940, Oklahoma boasted only a few physicians as compared to the 2,200 practicing physicians of today. This, too, has been partially made possible because of the ability of the people to pay for their care through an organization they helped to organize.

Group Hospital Service, a Mutual Cor-

poration, was incorporated under the provisions of Chapter 51, Article 14, Oklahoma Statutes of 1931. By the year 1949, the interest and enthusiasm in this organization had become so great that the people, through their legally-elected representatives in the Oklahoma State Legislature, passed an Act entitled, "House Bill Number 178." This Enabling Act established that a voluntary non-profit prepayment program was not insurance and would not be subject to the insurance laws of Oklahoma. Rather, it should be a non-profit prepayment program cooperating with all the health agencies of the state.

As a result of the rapid growth of Blue Cross, the physicians and civic leaders of the state began organizing a program for the purpose of providing medical, surgical, and orthopedic care. This program was incorporated under the provisions of Chapter 36, Oklahoma Statutes, 1941, Section 371 to 391. The name of this corporation was Oklahoma Physicians Service, a Mutual Corporation, and was incorporated on March 25, 1945. In 1949, this corporation also began operating under House Bill Number 178 (the Enabling Act). Oklahoma Physicians Service has served hand in hand with the hospital program, Blue Cross, and since its incorporation, has been a part of the nationwide program known as Blue Shield. It should be noted, however, that the Blue Shield Plan in Oklahoma has operated under an indemnity type program rather than a service program that has been adopted by the great majority of other areas of the United States.

At the same time these health care movements were forming in Oklahoma, the same activities were going on throughout the country. Today, every state in the nation and Alaska, Puerto Rico, and Canada have organizations serving the people at the local level through the democratic principle of freedom of choice by the public, doctors, and hospitals. The growth of these organizations has been called the fastest growing social movement in the history of the world. The physicians throughout the country testify as to their faith in this movement. For example, Elmer Hess, M.D., Past President of the American Medical Association, is very

convincing in the following statement:

"Without Blue Shield and Blue Cross and other insurance programs our hospitals and ourselves would be hard put to render the services that these two organizations have made possible. Since we have accepted the insurance principle, many patients who previously would be non-paying patients have had their bills at least partially paid, and I am rather intolerant of the physician who is not a participating member of Blue Shield and who complains when Blue Shield pays the patient and not him directly. I also am intolerant of the physician who in defense of his attitude in not being a participating member says with a loud voice, 'Nobody is going to tell me what to charge,' I am outspoken enough to say the physician who takes such an attitude is primarily interested not in service but in money. Today's professional freedom to be a private practitioner of medicine instead of a slave of government is due solely to Blue Shield—the physicians' answer to socialized medicine. Forgive me if I offend, but sometimes the truth hurts, and I am so jealous of the good name and the freedom of our profession."

The following chart will stimulate the imagination as to the tremendous strides which have been accomplished in so few years in Blue Cross and Blue Shield Plans.

TOTAL MEMBERSHIP

	<i>Blue Cross</i>	<i>Blue Shield</i>
1945	19,416,747	1,826,719
1950	39,399,662	16,629,596
1957 (March 31)	54,588,704	39,736,640

During the many years of operation of the voluntary non-profit health programs, there have been many attempts to imitate the service concept of the Blue Cross and Blue Shield Plans. This is evidenced by the many companies that have attempted to influence the buying public through the use of names suggestive of the Plans, including White Cross, Blue Circle, Royal Blue, Green Cross etc.

Commercial Insurance Companies

The commercial insurance companies have attempted to imitate Blue Cross through their offering of dollar indemnity contracts. A careful analysis of the indemnity pro-

gram reveals the insurance companies are trading dollars for dollars, and, obviously, the purchaser is receiving fewer dollars in return than they put into the program in premiums. In too many cases, the amount the patient has paid over and above the dollars received is so great that it still represents a very great financial hazard.

The basic desire as expressed by the people through the Blue Cross and Blue Shield prepayment service Plans is that the people desire the means to purchase relief from pain and suffering—not dollars. The poul-tice of dollar bills is of little therapeutic value!

The Blue Cross and Blue Shield non-profit prepayment service programs operate as the agencies for the hospitals and doctors, en-rolling people under a service benefit cer-tificate. Through the Plans, the people are actually receiving the services of the hos-pitals and physicians—not an indemnity of limited dollars. Since it is hospital and doc-tors' services the people desire, the dollar indemnity approach can not satisfy this desire.

Recognizing the inability of the dollar in-demnity approach to satisfy the basic de-sires of the people, the commercial insur-ance companies have designed a new ap-proach known as "Major Medical." This program is designed to imitate the deduct-ible approach similar to the automobile in-surance companies, which is just another type of idemnity. In this program, the in-sured must assume the responsibility for the first dollars of care ranging from \$50 to \$500 or more.

Then, the insurance companies participate in the cost up to \$5,000 or \$10,000, depend-ing on the contract purchased on a co-insur-ance basis of 75-25 or 80-20. This approach is so new that the experience is not yet suf-ficient to prove that it, too, is a blind alley in the attempt to satisfy the basic desire. This approach does not take into considera-tion several basic principles inherent in health care. The deductible of \$50, \$100, \$300 or more in addition to the co-insurance is too great for the majority of the people.

The majority of the population still does not count health care costs in the budget. On the other hand, at the point where the

deductible has been satisfied, there is no limit on the charge that can be made for the services except the maximum specified in the terms of the policy. If a pot of water is placed on the fire without a lid, the water will soon evaporate. If the cookie jar is put on the table without telling the children how many cookies they may have, the jar will soon be empty—even if the cookies make them ill. These truths being valid, the "Ma-jor Medical" approach can only result in increasing the cost of health care.

Even though the majority of the physi-cians are honest and honorable men, there are those among them who are subject to the human frailty. The urge to increase the charge when it is being paid by a third party is so great that the cost of providing bene-fits under the "Major Medical" concept will quickly become excessive.

Even the insurance companies' actuaries themselves attest to the inability to control the cost of the "Major Medical" Program as indicated by the following quotation from leaders in the insurance industry.

⁵"GROUP MAJOR MEDICAL COVER DANGERS DISCUSSED AT MEETING OF WEST COAST ACTUARIES: Dangers inherent in group major medical coverage were brought out in a discussion at the re-cent spring meeting of the Actuarial Club of the Pacific States at Pebble Beach, Cali-fornia. *It was pointed out* that in some in-stances the 75% or 80% payment of ex-penses merely constitutes an invitation to abuse. The most notable condition is the coverage of psychiatric treatment when not hospital-confined. Claim experience has clearly demonstrated that this coverage can not be insured on a conventional basis, and any payment for individual psychiatric treatment outside the hospital must be se-verely limited. *The co-insurance principle itself* is of little help in controlling of claims unless the total amount that must be paid by insured is so great that it will cause him to question his expenses as they are incurred and his bills as they are presented. *One company* indicated that its so-called basic major medical plans written without con-ventional hospital and surgical plans and with a deductible of \$50 were returning un-satisfactory experience. As plans got closer

to full coverage of an illness, experience worsened, although theoretically adequate extras for the additional coverage had been included in the premium. *Major Medicals Plans* integrated with conventional hospital and surgical plans produced generally satisfactory experience. Serious inadequacies in existing rates were found in east Texas and southern California."

Another outstanding leader in the insurance industry, J. F. Follman, Jr., Director of Information and Research, Health Insurance Association of America, has this to say relative to the "Major Medical" concept: "There is little question but that major medical and comprehensive insurance can result in a higher-fee-paying ability of the patient. It can result in the use of unnecessary or luxury forms of facilities and care. It can result in the over-utilization of medical facilities and, consequently, of the insurance."

Organized labor's representative, Jerome Pollack, Program Consultant, UAW Social Security Department, speaks very openly relative to his feelings concerning the effect of "Major Medical": "The insurance has also been vigorously opposed and feared as an influence that could undermine health insurance by misdirecting its effort and critically inflating its cost . . . the insurance is without valid controls to prevent an unwarranted inflation in the cost of health care."

Another important factor effecting the economics of health is that in the State of Oklahoma, primarily a state of rural population, we have a great number of persons who cannot be reached by the insurance companies who offer a reasonably good coverage. For the companies who offer a reasonably good coverage always follow the practice of providing coverage only to the most select risks. This method would leave the majority of our people to the mercy of the more unscrupulous companies who offer only a very minimum of coverage at a very high premium rate. The State Insurance Department has on record over 700 insurance companies and more than 10,000 agents registered to sell hospitalization and surgical insurance in the State of Oklahoma alone. Annual premiums paid for health

coverage by the people of Oklahoma during the year 1955 was \$49,679,797.00. Add this to the cost of health care for which the people were required to purchase direct exclusive of coverage and the figure is astronomical.

So it would appear that in the insurance companies' approach that there can be no control of cost, and it is highly probable that the cost of care will rise sharply. As this occurs, the desire to protect the company's interest becomes so great that it results in the age-old practice of cancelling coverage. This, in many instances, leaves the people without coverage at a time it is most needed. The hospitals and physicians then must assume the financial burden for the care that their patients had attempted in the past to provide for themselves.

This practice resembles that of the old share crop system which was so prevalent in the South in early days, and the serf system that existed in the early colony days where one individual or family controlled the lives and well-being of a great many families who tilled the soil. If illness in some of the families prevented them from producing their share, the landowner had the power to remove them and leave them to shift for themselves without homes. There is an old legend that pretty well describes the insurance approach: One night in ancient times, three horsemen were riding across a desert. As they crossed the dry bed of a river, out of the darkness a voice called, "Halt." They obeyed. The voice then told them to dismount, pick up a handful of pebbles, put the pebbles in their pockets and remount. The voice then said, "You have done as I commanded. Tomorrow at sun-up you will be both glad and sorry." Mystified, the horsemen rode on. When the sun rose, they reached into their pockets and found that a miracle had happened. The pebbles had been transformed into diamonds, rubies, and other precious stones. The remembered the warning. They were both glad and sorry—glad they had taken some, and sorry they had not taken more. And this the story of insurance.

The legend graphically describes the mental attitude of the buying public in their experiences with all kinds of insurance. The

insurance industry, including the local agents, have done a magnificent job of providing coverage to reduce the hazards of risk taken by the individuals and groups for life, fire, theft, automobile, and other types of casualty insurance.

Many devious attempts have been made by the insurance industry to design a health insurance program. These attempts, for the most part, have created much confusion and have fallen short of the demands of the people. For in far too many instances, it has been necessary to continue with the legend of the three horsemen: That evening the horsemen took shelter in an inn to rest from their long journey. The following morning, they attempted to pay the innkeeper with the precious stones. The innkeeper examined them carefully and found them to be imitations of little value.

The problems confronting health care can not be solved in this manner. It requires the interest and cooperation of all the people in the local community. For without this, we are right back where we started—people crying for relief to a paternal government.

Government Participation

In The Hospital-Medical Fields

Almost everyone is aware of some of the activities of the federal government in the health field. Unfortunately, far too few are fully aware of the extent to which the government is today participating in the provision of hospital-medical care for the people of the United States. A great number of governmental agencies have become active in the development, construction, and maintenance of medical and hospital facilities. Most important of these are the Veterans' Administration, Defense Department, including Army, Navy, and Air Corps, and the Health, Education and Welfare Agency. It is interesting to know, for example, ⁸that the federal government now has developed to date to the point of controlling 428 hospitals in 1955 with the staggering number of 183,162 beds, and requiring the services of 192,283 personnel. (These figures include the sum of full-time personnel plus full-time equivalents of part-time personnel, and excludes residents, interns, and students.) For the purpose of understanding what is happening in these fields, a review

of only the more important ones are presented.

Public Welfare

One of the major issues facing the legislators of the various state governments at the present time is the development of a program for the recipients of public welfare on a matching funds basis with the federal government. This federal government program is participating to the extent of \$3 per month per recipient of public welfare funds, old age assistance, aid for the blind, aid for dependent children, etc. The latest statistical information available shows there are 171,852 individuals who will be eligible for care under this program, involving approximately seven million dollars annually in Oklahoma. On a national basis, no one knows yet how many individuals will be ultimately eligible for care. Some estimates say between four and five million people. The eventual cost of this to the taxpayers of the country is not yet known, as all states have not yet taken action to participate in the matching funds program. For the fiscal period ending July 1, 1956,⁹ the cost of governmental vendor medical programs was \$200 million. The present Administration's budget estimates that the Federal Government's cost for this program will be increased by an additional \$58 million in the 1958 fiscal year. On these minimum estimates, it is easy to see that this program will soon be costing the taxpayers many hundreds of millions of dollars.

Veterans' Administration

Recent years have seen the expansion of veterans' old hospitals and the construction of more and more new veterans' hospitals in every major population center in the nation.

This vast network of veterans' hospitals in 1957¹⁰ number 173 with a total capacity of 121,031 beds, and an employment force of 114,123. The cost to the Veterans' Administration for the support of these facilities demands the appropriation for the year of 1957 of the staggering sum of \$702,000,000 for in-patient care only.

These hospitals were built primarily for offering hospital and medical care for men with service-connected disabilities. A sec-

ondary provision gives care to veterans unable to pay for care in private facilities.

Today, these hospitals are full and in some cases have long waiting lists. Upon admission to the veterans' hospital, little or no attention is given as to whether the veteran is able to pay for the services rendered. This practice has grown so rapidly that the Hoover Commission emphasized these abusive practices in one of its reports.

Such flagrant disregard for the assumption of personal responsibility occurs if a set of circumstances continually repeats itself and as a result causes individuals to resent them and begin rationalizing and making excuses to justify their action. These circumstances have served as a stimuli to bring about this condition and are identical with those that occurred in the minds of the people who caused the development of voluntary prepayment for the relief of the financial intruder that existed between the patient and the doctor.

The armed forces maintained the very best of hospital and medical care for servicemen during World War II and the Korean conflict. This was rightly so. While in the service, the men were educated to the fact that they had access to the best of health care—and at no charge.

After these men and women were discharged and returned to their local communities, however, they faced the problem of paying for the cost of hospital and medical care. Eventually, the veteran remembered the care he received while in uniform and began to rationalize as to what a good "deal" he really had: complete health care at no cost. His rationalization led him to the realization that the same facilities were available to him in the veterans' hospital—and again, at no cost.

Today, Oklahoma Blue Cross and Blue Shield, with their 465,000 members (representing approximately 20 per cent of the state's population) receive many letters each month from members who are veterans. A typical letter states that the member is eligible for care in the veterans' hospitals. He informs the Plans he wants to drop his coverage but instructs the Plans to continue membership for his dependents.

It is understood that the powerful organizations representing the veterans are continually attempting to bring pressure on Congress to remove the statement of financial ability for admission to a veterans' hospital, even though little concern is given to it upon admission today. However, once this is accomplished, the veteran will then be faced with only one remaining problem: how to obtain this same care for his dependents.

To begin to recognize the potent force behind these demands, one must realize that since the beginning of World War II, approximately 22 million men have served in the armed forces. These men, plus their dependents, add up to around 66 million people.

Medical Care for Dependents of Members of Uniformed Services

In 1956, Congress passed the Medical Care for the Dependents of Men of the Uniformed Services Act. This Bill was signed by the President on June 6, 1956. The Act provides that the dependents of personnel serving on active duty in any branch of the uniformed services shall be eligible for care in civilian facilities with the care to be rendered by private practicing physicians.

The provision of care for the dependents of uniformed services is not new. These dependents have been eligible for care in the facilities of the armed forces for a great many years. The approach, however, is new.

What brought this new approach about?

The Defense Department, because of the world situation, found it necessary to maintain a large military force for defense. The problems of retaining such a large number of men in the face of every-growing prosperity and the availability of high paying positions in industry, created an almost insurmountable problem in the retention of this force. One of the major problems confronted was the continual disturbance to the morale of the men because of health problems on the home front. Therefore, the officers responsible for maintenance of the defense force sought a solution to this morale problem. The program ultimately adopted was not the one originally intended for adoption.

There were three methods considered for

the solution of this problem:

1. The Doctors' Draft Bill was considered by the Congress to draft great numbers of civilian physicians to be placed in the armed forces facilities for the purpose of rendering care to the dependents of the men in the uniformed services.

The medical men of the country greatly objected to this approach. They said it was unreasonable that they should be drafted into the armed forces for the purpose of serving civilians they would normally care for at home in their local communities. Moreover, this approach was a threat to the private practicing physicians of medicine.

2. The second method was for the Defense Department to enter into contracts with group practice clinics and hospitals in each of the major communities of the United States to provide services for these dependents. This system was objected to strenuously for the same reason that such contracts would create an unfair monopolistic practice for such clinics and hospitals to the exclusion of the private practicing physicians and the community hospitals.
3. The third method came when someone was successful in obtaining consideration for a system of permitting participation by the local private practicing physician and by each of the general hospitals in the local communities.

Immediately following the signing of the Act by President Eisenhower, a committee of seven men was selected from the Blue Cross Plans across the nation, representing the Plans and the hospitals of the country, to work with the Task Force assigned to develop the hospital portion of this program.

Prior to December 7, 1956, the effective date of this Act, every state medical society with its administrative agent (which almost without exception was the Blue Shield Plan) met with the Task Force of the Defense Department to negotiate a contract for the cost of administration and the establishment of a schedule of fees that would serve as full payment for services rendered to the dependents of men in the armed forces.

No definite knowledge exists as to the exact number of dependents at the present time. There have been estimates, but the one which appears to be most reliable is 3,095,000. Likewise, the cost of rendering the care to these dependents has only been estimated. Although statistical data is not yet available, the most reliable estimate is \$280,000,000, for the care of these dependents on an annual basis. One can only exercise his imagination in determining the number of dependents and the cost if the nation should again become engaged in a world conflict.

The significance of the approach of permitting private practicing physicians and community hospitals to participate in rendering care for these dependents on an agreed contract basis is without a doubt the most significant development is the evolution of the solutions of the problems of financing health care. Every conceivable effort must be made to make this approach work. If it should fail, then those responsible in government will have no alternative other than to turn their attention to the development of group practice—either in governmental facilities or the taking over of clinics and hospitals for providing care to these dependents. Should this occur, it might be established as the power for the development of care for all of the people in the United States who are already coming under the control of the federal government.

Summary of Government Participation in Health Costs

Of the estimated \$14 billion¹¹ total medical bill of the nation, 24 per cent is borne by these various governments, often on a joint financing basis. The federal government in 1955 spent some \$2 billion on disability allowances, \$1.7 billion for operational services, \$199 million for federal hospital construction, and \$207 million for grants, of which \$75 million were under the Hill-Burton Act and \$41 million for research. Of all hospital beds in 1949, 71 per cent were furnished by government, although their use accounted for only 25.6 per cent of hospital admissions, since duration of stay in government hospitals is longer, due in part to care for long term chronic and mental illnesses.

The federal government has undertaken a large measure of responsibility with respect to the entire population and specific responsibility for all or part of the medical care of over 30 million persons (not including totally and permanently disabled OASI beneficiaries over age 50 now eligible but whose numbers are not yet known). About four million are entitled to complete medical care. These include active duty military personnel, indigent Indians, Merchant Seamen, Coast Guard personnel, Federal prisoners, detained aliens, drug addicts, lepers, and others. Three and one half million veterans are entitled to complete care for service connected disabilities.

Over 20 million are eligible on a facilities available basis; these being mostly veterans, dependents of military personnel, and retired military personnel. Additionally, 5.1 million persons receive public assistance under state programs (some of them federally aided) and these persons receive medical care. Ten per cent of all active physicians, 9 per cent of dentists, and 6 per cent of graduate nurses are employed by the Federal Government. In 1953, \$152 million of medical supplies was purchased by the Federal Government.

¹²The ever growing demand for the relief from the economic problems of health care are graphically demonstrated in the number of Bills presented to the Congress.

In the 82nd Congress (1951-1952), there were 250 such Bills. In the 83rd Congress (1953-1954), there were 407, and in the 84th Congress (1955-1956), there were 570 Bills presented.

This brief resumé of government approaches to the problem of medical care and its financing in the United States would seem to indicate rather clearly this fact. To the degree non-governmental means cannot or do not provide for the costs of medical care, government is prepared to assume—directly, through taxation; indirectly through compulsory employer-employee contribution; or both—or designate—usually the employer—the responsibility to the end that there shall be adequate medical care for all.

Conclusion

As has been previously stated, it would appear that the great majority of men and women who are supposed to be the opinion leaders of our committees have been laboring under the delusion that federal control of medicine is a forgotten issue. Such is not the case. It is hoped that this review of the circumstances and developments that have occurred since the sowing of the seed in the minds of the masses of the people to solve the uncontrolled problems of the financing of health care will also move them to include health care in their budgeting for the day-to-day necessities.

By reviewing these facts, it becomes increasingly certain that the seed sowed in the minds of the people of this country has been most productive, and the potent force that has been created out of this idea will not be stopped. It is entirely possible and, indeed, probable, that within the next four to eight years, definite action will be taken to provide health services to all the people of this country under the control of federal government. One needs only to recall that this subject has been a major issue in the last three presidential elections to verify this conclusion.

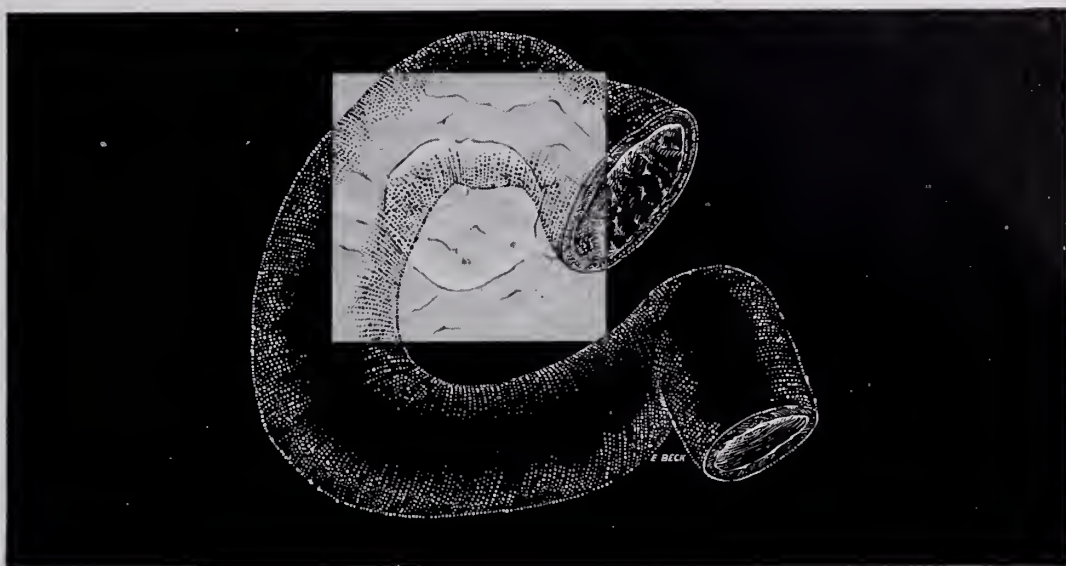
It would appear that these potent forces have developed to the point that there is only one possible alternative: for the people in the local communities to join forces with members of the medical profession and representatives of the community hospitals and arrive at positive and harmonious agreements to the solutions of the problems of financing health care.

This article is reprinted in full from the manuscript supplied by the Blue Cross-Blue Shield Plans, representing the view of the author, Mr. Bethel.

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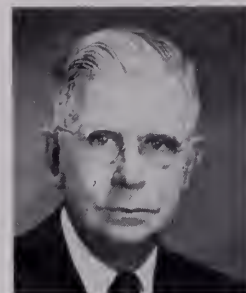
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SEARLE

PRESIDENT'S LETTER



Recently I received a request from Doctor Mark Everett, Dean of the School of Medicine of Oklahoma University. This request was in regard to the appointment of a Liaison Committee from the State Medical Association to confer and advise with the faculty of the Medical School. I was most pleased to receive this request because it embodies an approach to the development of our Medical School that I have long advocated.

The Medical School is an integral part of Oklahoma University. It does not belong to the faculty; it does not belong to the medical profession, but it does belong to the citizens of our glorious State. Its purposes are manifold, but in my opinion, its chief purpose is the preparation of young men and women to go out and render good professional medical care to the people of Oklahoma.

The State Medical Association can render service to the Medical School in many ways, but its foremost offering would be that of counseling the faculty in the training of young doctors in the care of sick people. I feel that not only our School but many other medical schools today have become so engrossed in scientific discoveries and research, the teaching of medicine as an abstract science and the impersonal approach to an illness as just another scientific problem, that the finished product is a most highly educated person but with very little practical "know how." This is then a most forward step on the part of the Medical School and it is certainly a challenge to our Medical Association to render constructive service.

John Black Burton, M.D.
President

Association Activities

O.U. Medical School Receives \$135,403

The Oklahoma University School of Medicine has received \$135,403 in grants from the National Foundation for Medical Education during the past seven years according to a statement recently released through the office of the dean. These monies included contributions made to the American Education Fund, which channeled its funds through the NFME until this year.

The American Medical Education Foundation was organized and sponsored by the American Medical Association in 1951 to seek financial contributions in behalf of the medical schools. The medical profession's annual goal is \$2,000,000 and this sum is needed in addition to funds contributed annually from other sources. Together with contributions from industry through the NFME, the AMEF grants go to meet the annual \$10,000,000 operational deficit of the nation's medical schools.

Although the fund grants are unrestricted, the school has used them entirely for the support of the instructional program, as can be seen from the following breakdown:

Salaries for faculty members	\$ 81,038
Salaries for technical assistants	17,226
Development of teaching departments and recruitment of needed faculty members ---	14,387
Teaching and laboratory equipment	11,694
Attendance of faculty members at scientific meetings and conferences important to the school	4,240
Support of professional meet- ings at the Medical Center	1,961
Remodeling of teaching facilities	857
Unexpended funds	5,000
<hr/>	
TOTAL	\$135,403

Contributions made by physicians to the A.M.E.F. are tax deductible and may be given to either the General Fund or earmarked for a specific school. The American Medical Education Foundation is located at 535 North Dearborn, Chicago 10, Illinois.

Voluntary Health Insurance Coverage Reaches New High

The number of people in Oklahoma who are covered by voluntary health insurance reached a new high by July 1, the Health Insurance Council reported recently. The Council estimates that nearly 1,250,000 persons were protected by some form of insurance designed to help pay hospital and doctor bills.

This figure, the Council said, is part of the continued growth of health insurance throughout the country, which was revealed last May in its 11th annual survey of the extent of voluntary health insurance coverage for 1956. The number of people covered by some form of health insurance in the nation today is more than 118 million, or over 70% of the U.S. civilian population.

In releasing the findings of its survey, which is based on reports of insurance programs of insurance companies, Blue Cross-Blue Shield and other health care plans, the Council went on to say that there were 1,181,000 persons covered by hospital expense insurance in Oklahoma as of December 31, 1956. The total for 1955 of the number of persons covered for expenses incurred while in the hospital was 1,042,000.

Surgical expense insurance, which helps to defray the cost of physicians' charges for operations rose to 1,098,000, as compared with 936,000 the year before.

Persons protected by regular medical expense insurance, providing for doctor visits for non-surgical care, numbered 747,000 in 1956, as against the previous year's figure of 647,000.

The Health Insurance Council, which is a federation of eight insurance associations representing over 90% of the accident and health insurance business handled by insurance companies, stated that this growth reflects the desire of the people of Oklahoma to help protect themselves against the cost of accident and illness.

'Weight-Reducing' Medicines Under Congressional Attack

"Weight-reducing" medicine for sale over-the-counter at drug stores are under attack at a House subcommittee hearing, which to date has produced no testimony in defense of these products. It is a subcommittee of the House Government Operations Committee, under chairmanship of Rep. John Blatnik (D., Minn.) which is attempting to show that advertising claims for the preparations are in many cases misleading and fraudulent.

Dr. S. William Kalb of Newark, N. J., stressed that weight could be reduced only by cutting the caloric intake to the point where less was being eaten than the body was using up. The products at issue, he said, were at best an aid or "crutch" to the overweight person, and at worse represented a danger by possibly introducing drugs or other substances that might be injurious to the particular patient. His solution would be to remove all such products from the over-the-counter status, restricting their sale to physicians' prescriptions. In effect this would end their use in most cases because physicians wouldn't prescribe them, in his opinion.

Dr. Leon Hirsh of Cincinnati, who has written and done research on obesity, agreed with Doctor Kalb that the preparations should be restricted to prescription. He said most of them are worthless and harmless, but that those containing phenylpropanolamine are a potential danger as they could cause coronary attacks or cerebral hemorrhage in certain individuals.

Maye A. Russ, head of the National Better Business Bureau's food, drug and cosmetic division said the trouble was caused by a minority of irresponsible manufacturers who exploit a gullible public. She explained that the bureau screens advertising on request, and asks manufacturers to withdraw questionable copy voluntarily. If they refuse, the cases are referred to appropriate federal or state authorities for prosecution. She listed nine criteria used by the bureau to establish that claims are

Dr. Hess Appointed Chairman National Advisory Committee To Selective Service

The President has appointed Dr. Elmer Hess of Erie, Pennsylvania, Chairman of the National Advisory Committee to the Selective Service System.

Doctor Hess has also been appointed Chairman of the Health Resources Advisory Committee to the Office of Defense Mobilization Executive Office of the President as announced recently by Gordon Gray, Director of the Office of Defense Mobilization.

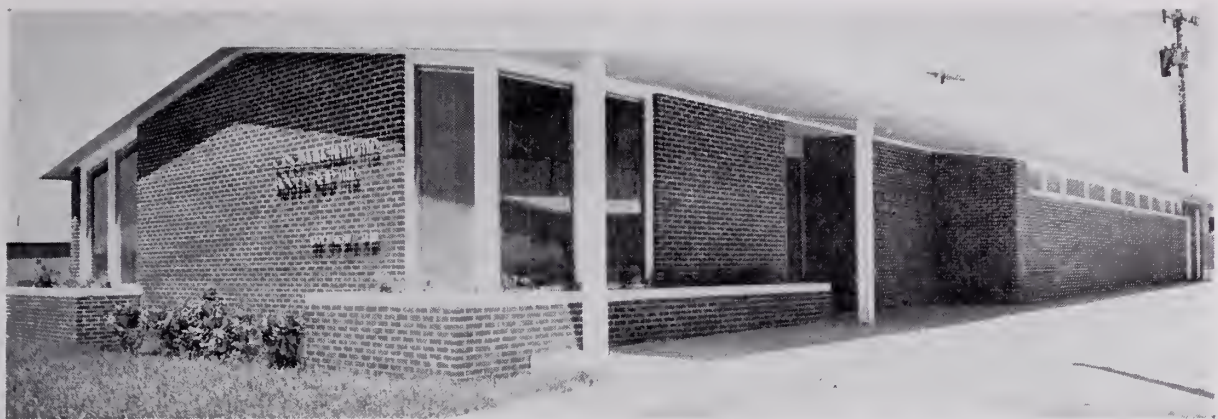
In both these capacities Doctor Hess will replace Dr. Howard A. Rusk who resigned.

Doctor Hess is well known as a leader in American medicine. Among other positions he has held are the presidencies of the American Medical Association and the American Urological Association. Doctor Hess served as a Captain in the Army Medical Corps in World War I and is at present overseas consultant for the U. S. Air Force.

deceptive, then, speaking specifically of items in the drug field, declared:

"The advertising of so-called obesity remedies or weight-reducing products is an area fraught with deception and outright fraud. This field is a particularly fertile one for unscrupulous advertisers, in view of the millions of overweight people and published medical data concerning the higher incidence of heart disease, high blood pressure, diabetes, etc., among the overweight. According to our information, none of the known products available for over-the-counter sale will, in themselves, cause a reduction in weight. This can be achieved only by reducing the caloric intake in relation to maintenance requirements."

Post office officials said the profit from quackery in sale of these and other preparations runs into hundreds of millions of dollars a year. The post office department indicated its staff of three men assigned to such investigations "can only hit the high spots," although 300 to 500 cases a year are investigated.



Ardmore Physicians Open New Office Building

Two Ardmore physicians, C. D. Cunningham and Roger Reid, have recently moved into their new offices, pictured above. The brick and steel structure which contains 4,500 square feet is conveniently located near the Memorial Hospital of that city.

Features of the building include a large waiting room, five examining rooms for each physician, recovery room, nurses' and receptionists' lounge and a business office which is adjacent to the waiting room. Unique are the laboratory and x-ray facilities which form a central island, accessible from either side. One end of the building is devoted to a private staff and ambulance entrance, leading to an emergency room.

The building was designed by architects Joe Kennedy, Jr. and Associates and constructed by J. A. George and the Devon Construction Company.

The Journal invites photographs and descriptive information from other recently completed medical buildings. Photographs should be 8 x 10 glossy prints.

Second Councilor District To Hold Annual Meeting at Cushing

The traditional Annual Meeting of the Second Councilor District of the Oklahoma State Medical Association will be held September 17 in the Hotel Cushing, it was announced recently by J. Murphree, M.D., Vice-Councilor.

Dr. West, Dr. Turner Present At Groundbreaking Ceremonies

W. Kelly West, M.D., and Henry H. Turner, M.D., both of Oklahoma City were present at the recent groundbreaking ceremonies for the new Southern Medical Association headquarters building in Birmingham, Alabama. Doctor West is President-Elect of the Association, and Doctor Turner serves on the Home Building Finance Committee and the Executive Committee.

J. P. Culpepper, Jr., M.D., President of the Southern Medical Association presided at the ceremonies in which Doctor West and Dr. Milford O. Rouse, First Vice-President in line of succession, Dallas, took part along with ten members of the Council.

Actual construction of the building was scheduled to get under way several days later with occupancy of the building expected by not later than March 14, 1958. The building is being paid for by contributions from friends of the Association. The Association had in its reserve sufficient funds for the purchase of the lot, \$50,000. There will be needed somewhere between \$150,000 and \$175,000 to complete the building. Sufficient contributions have been received to get the building underway; however, much more will be needed. It is hoped that by the time the building is complete friends of the Association will have contributed sufficiently to complete the payment of it. Contributions are deductible for federal income tax purposes and should be sent to C. P. Lorz, Secretary, Home Building Finance Committee, 1020 Empire Building, Birmingham 3, Alabama.

Doctor Draft Law Expires; New Legislation Provided For Specialists' Services

Amendments to the Universal Military Training and Service Act, as amended, adopted in June 1957, replace the former "Doctor Draft" law and provide for meeting the requirements of the Armed Forces for medical, dental, and allied specialists until July 1, 1959. Under the new amendments only those specialists who are otherwise liable as regular registrants are subject to induction under the Selective Service Law.

The old "Doctor Draft" law under which medical, dental, and allied specialists had been liable since 1950 expired July 1, 1957. It had placed liability for service on older doctors, dentists, and allied specialists, at one time up to the age of 51.

One of the principal effects of the new amendments to the basic Selective Service law is to limit liability of doctors, dentists, and allied specialists to age 35 for those deferred on or after June 19, 1951; and to age 26 for others. Public Law 85-62, which amends the basic Selective Service law with respect to these specialists, was signed by the President on June 27, 1957. By placing medical, dental and allied specialists under the same provisions of law and regulations as other registrants with respect to the upper limit of the age of liability, the 1957 amendments relieve from liability under the Universal Military Training and Service Act, as amended, any such specialist over the age of 32 on the date the amendments became effective—July 1, 1957. This is true because in order to have acquired extended liability under the June 19, 1951, amendments, a registrant must not only have been deferred on or after that date, but also must have attained the 26th anniversary of his birth by that date. Any man who was 26 on June 19, 1951, would, on July 1, 1957, have been 32 years old.

The amendments in addition provide that:

(1) No person in the medical, dental, and allied specialist categories shall be inducted if he applies for an appointment as a Reserve officer and is or has been rejected for such an appointment on the sole ground of

physical disqualification.

(2) The President may order to active duty for not more than 24 consecutive months any member of a Reserve component who is such a specialist, who is under 35, and who has not performed at least one year of active duty in the Armed Forces.

(3) Any such person called or ordered to active duty from a Reserve component of the Armed Forces and who serves on active duty as a specialist for 12 months or more, shall upon release from active duty or within six months after release, be given an opportunity to resign the commission unless he is otherwise obligated to serve on active training and service in the Armed Forces or in training in a Reserve component by law or contract.

(4) Any physician or dentist qualified for a Reserve commission shall, so long as a need for his service exists, be given an opportunity to volunteer for active duty of not less than 24 months.

(5) The President may prescribe rules and regulations for the selection or induction of persons by age group or groups and for the selection and induction of persons qualified in needed medical, dental, or allied specialist categories pursuant to requisitions submitted by the Secretary of Defense.

(6) Qualified specialist aliens liable for induction shall not be held ineligible for appointment as commissioned officers solely on the grounds that such alien specialists are not citizens or have not declared their intention of becoming citizens.

(7) Any qualified person who is liable for induction, or who is ordered to active duty as a member of a Reserve component as a physician, or a dentist, or in an allied specialist category, shall be appointed, reappointed, or promoted to such grade or rank as may be commensurate with his professional education, experience, or ability provided that any person in a needed medical dental, or allied specialist category who fails to qualify for, or who does not accept, a commission, or whose commission has been terminated, may be used in his professional capacity in an enlisted grade.

(8) Periods of active duty performed by

such specialists in student programs prior to receipt of appropriate professional degree or in intern training shall not be counted toward establishing the qualification of such specialists for classification as a veteran exempt from liability for training and service.

(9) It is the sense of Congress that the President provide for deferment of optometry students and premedical, preosteopathic, preveterinary, preoptometry, and predental students in numbers at least equal to the numbers of such male students now studying in colleges and universities.

(10) Public Law 62, 85th Congress, amending the Universal Military Training and Service Act, as amended, to provide service liability for persons in medical, dental, and allied specialist categories, expires on July 1, 1959.

With the expiration of the requirement for special registration of medical, dental, and allied specialists, such specialists under the amendments of June 27, 1957, should notify their local boards within ten days of the attainment of degrees in these fields.

Gains in Longevity Since 1900

Continued progress in the control of disease has greatly extended the average length of life in the United States. Under mortality conditions prevailing around 1900, the expectation of life at birth was not quite 50 years. By 1930, the figure had risen to about 60 years; in 1955, the latest available, it was 69.5 years. Thus, about 20 years have been added to the expected life-time since the turn of the century. In 1955, as in earlier years, white females had the best record for longevity. Their expectation of life at birth was 73.6 years, compared with 67.3 years for white males; corresponding figures for the nonwhite population were 65.9 years and 61.2 years, respectively.

The increases in expectation of life have been largest in infancy and childhood, but notable gains have also been made at the adult ages. Since 1900-02 the expectation of life at age 25 has increased seven years among white men and 11 years among white women; at age 45 the corresponding gains

have been three years and six and one-half years.

In recent decades, females have enjoyed a lower mortality than males at every period of life. In fact, the death rate among white females is now less than two per 1,000 in the age range one through 39 years and remains under 10 per 1,000 through age 58. For white males, the mortality during childhood and early adult life has also declined to very low levels. Nevertheless, over much of the life span the death rate among males is more than one and one-half times that for females. Around the age of majority, when the sex difference in mortality is at a maximum, the ratio is nearly three to one.

Coincident with the reductions in mortality during the present century, the chances of survival from birth to the adult ages have increased markedly. According to mortality conditions in 1900-02, 24 per cent of newborn white males and 21 per cent of the white females failed to survive to their 20th birthday; currently, only three or four per cent are likely to die before that age.

The success achieved in preventing premature death has also greatly improved the outlook for survival through the productive years of life. The chances that a white man will survive from age 20 to age 65 have increased from 514 per 1,000 in 1900-02 to 686 per 1,000 in 1955. Although the gains decrease progressively with advance in age, more than three fourths of those who now attain age 50 can expect to reach normal retirement age.

The prospects of survival for females have improved so much that women have now better than four chances in five of living to see all their children reach maturity. In fact, survival to age 65 is more likely for women at age 20 than for men who have passed their 55th birthday.

The expected lifetime beyond age 65 has also been extended somewhat since 1900. For white men, the chances of living an additional 10 years have increased from 545 per 1,000 to 605 per 1,000. Moreover, the expectation of life for men who attain age 75 is now fully eight years; for white women it is 9.2 years.

Southeastern Oklahoma Clinical Symposium Held in McAlester

Under the sponsorship of the McAlester Clinical Foundation the Southeastern Oklahoma Clinical Symposium was held at the Aldridge Hotel in McAlester, August 10 and 11.

Saturday evening the guests were entertained at a dinner-dance at the McAlester Country Club and golf and fishing were made available to all those who wanted outside exercise. Registration for the meeting was 124.

John Flack Burton, M.D., President of the Oklahoma State Medical Association addressed the group at the Sunday afternoon session. Doctor Burton spoke to the group on the recently revised "Code of Medical Ethics" adopted by the House of Delegates of the American Medical Association at the 1957 Annual Meeting in New York City.

A.M.A. Studies Chemical Laws

A hodge-podge of state and federal laws regulating the labeling of hazardous chemicals and the need for a uniform chemical law recently were revealed by the American Medical Association study. Sponsored jointly by the A.M.A.'s Committee on Toxicology and Law Department, the study was made in preparation for drafting a model chemical labeling law. A conference of interested representatives of government, industry and medicine will be called this fall to draft a model law which then can be submitted to legislative bodies.

The proposed legislation is intended to reduce careless and ignorant handling of potentially harmful products in and around the home, small business and other areas where control of over-exposure to chemicals is not as efficient as in the manufacturing process. This law will require informative labeling, including listing of possible harmful ingredients, their potentialities for danger, directions for safe use and first-aid instructions.

Oklahoma City Clinical Society Schedules 27th Annual Meeting

The Oklahoma City Clinical Society will open its twenty-seventh annual three day conference at the Biltmore Hotel on October 28, 1957.

An outstanding program of postgraduate teaching has been arranged. This includes lectures and discussions by fifteen distinguished guest speakers selected from various medical and teaching centers throughout the nation. In addition to the general assemblies there will be specialty lectures, a clinical pathologic conference, and daily luncheon roundtable question and answer sessions.

The entertainment will include a banquet on Monday evening at which time the Oklahoma County Medical Society will be host to the guest lecturers and out-of-town doctors. Kenneth McFarland, Ph.D., of Topeka, Kansas, nationally known lecturer and entertainer will be the principal speaker at this banquet. On Tuesday evening, there will be a social hour followed by nine specialty group dinners, and on Wednesday evening, to climax the three day conference, the annual dinner-dance sponsored by the Oklahoma City Chamber of Commerce will be held.

The Conference has been approved for credit under category I by the American Academy of General Practice. Registration fee for Association Members is \$20.00 which includes all features of the meeting.

The Clinical Society officers are: Herman Fagin, M.D., President; Charles Hugh Wilson, M.D., Director of Clinics; Ralph A. Smith, M.D., Vice-President; Vernon D. Cushing, M.D., Secretary; and Thomas C. Points, M.D., Treasurer.

A cordial invitation is extended to all physicians who are members of their County Medical Societies to attend this meeting from October 28th through October 30th.

For further information write Mrs. Alma O'Donnell, 503 Medical Arts Bldg., Oklahoma City.

A.M.A. Suggested Guides To Relationships Between Medical Societies and Voluntary Health Agencies

Voluntary health agencies are an American institution. They have developed within the past half century. Starting with the National Tuberculosis Association in 1904, the agencies at the national, state and local level, devoted wholly or in part to health promotion, are now numbered in the hundreds.

Physicians and medical societies, concerned as they are with the diagnosis and treatment of disease and the promotion of health, are expected by the public to support these many voluntary efforts. Each agency strives for medical approval and wants to count physicians among its members.

Nature of Voluntary Health Agencies

Agencies concerned with health vary widely in organization, objectives, means for attaining objectives, fund raising methods, membership, and relationship of groups at national, state and local levels. However, even with these variations, not infrequently, their likenesses are more notable than their differences. Their principal characteristics are:

1. A voluntary, nongovernmental association of citizens, with
2. A common goal or interest, usually the prevention and control of some disease or infirmity, which
3. Gathers voluntary contributions, gifts, memorials, and memberships, and
4. Expends its resources in ways decided by the governing body of the agency, most often for public and professional education, medical and basic science research, and in a number of instances the underwriting of medical care.

The kinds of community agencies interested in health, including the voluntary health agency can be classified into the following types.

1. The local subsidiary of a national agency concerned with a single disease condition which uses its funds primarily for health education of the public, possibly for research and in some instances, to provide medical care. Examples of such organizations are the National Tuberculosis Association, the American Cancer Society and the

National Foundation for Infantile Paralysis.

2. The local subsidiaries of national agencies concerned with a certain group of people having common problems which may be the result of a variety of related diseases. Among these are such agencies as the National Society for Crippled Children and Adults and the National Association for Mental Health.

3. Local subsidiaries of national organizations whose primary interest is civic betterment but who from time to time become interested in preventive medicine or provide medical care for specific short term problems. Among these are the national civic organizations such as Rotary, Lions and Kiwanis, business groups such as the Chamber of Commerce, academic fraternities and sororities, and women's organizations.

4. Locally organized groups, which may or may not be affiliated with a national program or agency, such as the auxiliary groups supporting local hospitals or clinics, infant welfare societies, local health councils, and social agencies in the fields of family welfare, adoptive placements, family counseling and various youth activities.

5. Community coordinating groups such as welfare councils, health councils, community chests and similar groups engaged in community planning, in administrative research and in the distribution of money gathered through federated giving.

The larger and better known voluntary health agencies have now become an accepted part of our culture. They have made available contributions to education and research. Many of the smaller, more recently developed agencies are equally reliable and at least as valuable. However, even though these agencies have medical direction at the national and state level and are accepted by the medical associations at these levels, an effort must be made toward mutual understanding at the local level including medical direction.

Voluntary Agency Evaluation

The medical society is dedicated to maintenance of health in the communities its

members serve. It, therefore, has an interest in and an implied responsibility for citizen groups who profess a similar dedication. Any agency that collects dues and contributions so that it may conduct health education, research, and service for the prevention of disease and the rehabilitation of the crippled, therefore, becomes an object for medical society consideration.

The medical society approach to any agency should be friendly, since these agencies intend to promote health through support of sound medical practice. It should also be constructively critical, since occasionally uninformed enthusiasts can make mistakes which distort even well planned policy. The evaluation that a local medical society makes of a local voluntary agency must answer at least the following questions.

1. What relation does the local voluntary agency have to a similar state or national agency? Is it a subsidiary chapter, affiliate or independent competitor?

2. Why was it started in this community? Who started it and what interests are promoting it?

3. Are the purposes and stated objectives of the agency desirable, in conformity with those of the parent agency, medically justifiable, and possible of attainment by the program proposed by the agency?

4. Does the agency respect local customs for collecting money in the drive for memberships and contributions?

5. Is the fund goal realistic when related to community needs and the anticipated overall program of the agency at the local, state, and national levels?

6. Is the cost of fund raising and administration comparable to similar expenses of other agencies in the community and reasonable in relation to expenditures for the stated objectives?

7. Are the educational and promotional materials medically correct, ethically presented, in good taste and educationally sound?

8. Can the expenditures allocated for research be justified by local disease problems as well as by national research needs?

9. How are expenditures for service related to local needs for such service and to the established community programs for medical care?

Medical Society Obligation to Voluntary Agencies

Most voluntary health agencies warrant medical society participation and support of their policies. In the interests of enlisting public support for the promotion of health, medical societies have an obligation to help agencies conform to good practice. Most voluntary health agencies would be more susceptible to modification of their practices by participation, support, and advice from the county medical society than to adverse criticism and opposition. Medical societies may offer assistance in many ways, among which are:

1. Arrange liaison by making available medical society representation on the governing board of the voluntary health agency.

2. Make available an advisory service to the agency on policy and practice decisions that involve matters relating to medicine or physicians.

3. Cooperate with the agency in planning its program in relation to community health needs and evaluation of how well those needs are being met.

4. Encourage medical society members to stimulate public support of the agency and its program.

Voluntary Agency Obligation to the Medical Society

Every voluntary health agency, or organization concerned with matters of medical care and health promotion has certain obligations to the community in which it operates and to the physicians and their medical society who provide the health service in that community. To enjoy the confidence of the medical society and merit its continuing support, voluntary health agencies need to meet certain obligations, among which are:

1. Its basic policies regarding medical care and preventive medicine should conform with the policies and practices acceptable to the medical profession in that particular community.

2. The governing board of the voluntary agency should in all instances provide an opportunity for representation of the medical profession designated by the county medical society.

3. Problems involving medical policy and practice should be considered in consultation with appropriate medical society committees.

4. The program of the agency, including the collection and disbursement of its funds, should conform to community custom, be related to the community's needs, and the overall program of the agency at the local, state, and national level.

The Role of Physicians in Relation to Voluntary Health Agencies

The individual physician plays four separate but related roles when he becomes affiliated with a voluntary health agency or other voluntary organization concerned with a phase of preventive medicine or medical care.

1. He may be delegated as an official representative of his medical association, in which case he acts for the medical society expressing the consensus of his colleagues.

2. He may be called on by an agency to serve it as a physician in ways suggested by his specific professional interest.

3. Because of his interests, he may seek membership on his own accord and become active in an agency's program.

4. As a private citizen interested in his community, and regardless of his profession, he may use a health agency as the medium for public service.

The obligations of these roles are quite different. It is therefore imperative that both the physician and the voluntary health agency he is serving recognize the particular role being played. The representative of a medical society designated to serve as an official channel of communication has a different status than a private physician serving an agency as an individual. A physician selected by a voluntary agency to serve on its board, has no authority to speak for the local medical society unless granted that authority by action of the medical society.

This point is quite confusing to agencies

who are not acquainted with interagency representation. Physicians who are close to interagency personnel should explain that though physician membership on a board of directors is desirable and is to be encouraged, such members do not represent the medical society unless they have been named by the medical society as its official spokesman.

All voluntary health agencies depend on membership dues and voluntary contributions. They also must have contributed time of volunteer workers interested in promoting the agency's objectives. Since the community looks to physicians for endorsement of a health agency, the physician is obligated to speak well of an agency whenever possible. He also will feel obligated to support with time and money those agencies in which he has personal interest.

Summary:

1. The voluntary health agency is now a recognized community function, and most agencies merit medical society support of their objectives, though the medical society, in some instances, might press for changes in policy or procedure.

2. Medical societies and voluntary health agencies have mutual obligations. Medical societies should participate and when desired give agencies advice and counsel on the medical and civic aspects of community needs. Voluntary health agencies should establish liaison with the medical society and frame their programs to conform to sound medical practice.

3. Physicians should support voluntary health agencies within their sphere of interest, and recognize whether their role is as official representative of the medical society, interested physician, or private citizen.

1957 Medical Journal Conference To Be Held in Chicago

The annual State Medical Journal Conference will be held Monday and Tuesday, October 28 and 29, 1957, in Chicago.

Dr. Everett M. George is Chairman of the Conference, said that the daytime sessions will be held in the A.M.A. headquarters building with the evening session scheduled for the Boulevard Room of the Sheraton Hotel.

91 Senior Medical Students Take State Exams

Ninety-one senior medical students from the University of Oklahoma's School of Medicine took the examinations before the Board of Medical Examiners on June 11 and 12, 1957.

Those taking the examinations were: Gerald William Boles, John William Hood, Howard Barton Keith, Sherman Allen Hope, Richard Franklin Barbee, George John Shibley, Lloyd Glenn McArthur, Billy Joe Bird, Cecil Ray Stansberry, Jr., Bradley Egerton Smith, Orville Alton Rinn, Floyd Edmond Webb, Jr., Frederick Lou Lang, Jacob Paul Reimer, Harry J. Kearns, Jr., John Edward Talley, Lloyd Melvin Hummer, Paul Neeley Vann, George Robert Cornelius, Rodney Dwight Steward, James Thomas Payte, Benjamin J. Lambiotte, Jr., Kenneth Hugh Bagwell, John Andrew Orbin.

Others in the group were: Winfred Louis Medcalf, Gene Richard Smith, Daniel Joseph Sprehe, Donald Morris Phillips, William Orlando Smith, Bryce Owen Bliss, Barbara Foster Braden, Loren Kent Yates, Donald Kent Braden, Ivan Doyle Siddons, John Leif Ritan, Jack L. Coats, Wilson Ervin Durham, Charles Reiff Brown, David Lee Mackler, John Richard Smith, James Douglas Green, Richard Bard Johnson, Floyd T. Hubbard, Paul Rupert O'Bar, Wanda Lorraine Watkins, King Graham Price, George Norman Haddad, Jr., Maurice Lyle Peter, Jr., Robert Francis Peterson, John Clarence Burr, Ralph Richard Markland, William Lee Savage, Robert Arnold Honea, Don Lee Dycus, William Lee Parker, Fred Richard Martin, Charles Leslie Nickolls, Howard Lavern Nash, James Otto Morse, Thomas Neil Vaughn, Samuel Maxie Davis, Jack McKinely Stephenson, Lee Hunter Riley, Jr., Elta Howard Jayne, Charles Joseph Gebetsberger, Oliver William Jones, Jr., Roger Ray Paul, Thomas Allen Goodman, Paul Sullivan Holley, Willard Charles Kennedy, Bernard Joseph Dolenz, Chester Lee Bynum, Robert Keith Ellis, Wayne Franklin White.

Completing the list were: David Eugene Livingston, Victor Ray Neal, Avery Paul Compton, John M. Kalbfleisch, William Lyon Hughes, Thomas Watson Thurston, Horace Ellis Hewett, Sammy Harry Kouri, Riley W. Park, Jr., Harold Harvey Mings,

Dr. Melvin E. Griffith Visiting in Norman

Dr. Melvin E. Griffith, a malariologist from Norman, Oklahoma, has returned to the United States on home leave, after spending a total of six years in Thailand. Doctor Griffith and his wife reached their home in Norman in August and return to Thailand in September.

A graduate of the University of Kansas with a Ph.D., Doctor Griffith is on assignment with the International Cooperation Administration, the agency responsible for the Mutual Security Program. Before going to Thailand, Doctor Griffith, a commissioned officer of the U. S. Public Health Service, served as State Malaria Control Entomologist with the Oklahoma State Department of Health and Professor of Entomology and Public Health at the University of Oklahoma.

As chief malaria advisor in Thailand, Doctor Griffith's job is to advise and assist the Thai Ministry of Public Health in planning, developing and coordinating an effective program which will ultimately end in the eradication, control or prevention of malaria and other vector-borne diseases.

Doctor Griffith feels that more benefits have resulted from the malaria program than just the successful reduction of the disease. "The program has helped to generate a greater health consciousness, not only in Government circles, but throughout the country. It has also made a contribution towards developing the new concept of villagers joining in a cooperative effort and a common goal—to help improve the general welfare for all."

Mrs. Griffith has also spent a productive six years in Thailand. A trained medical technologist, Mrs. Griffith has given considerable time to the Women's Hospital in Bangkok and to special technical English instruction for medical students and participants scheduled to go to the United States for study.

Kenneth Dean Meinhardt, Philip Greenwood Walters, Jerry Wayne Sullivan, Charles Watson Robinson, Jr., Tracy LeNeil Kobs, James Allen Crabtree, and Delbert Hugh McGinnis.

Sears-Roebuck Plan Blocked By Internal Revenue

A study currently being made by the Internal Revenue Service has caused Sears-Roebuck officials to temporarily suspend their financial assistance program for the establishment of medical facilities. Since February, the program has been under study by the government agency to determine if it is a proper charitable activity.

For the past two years, the American Medical Association has cooperated with the Sears-Roebuck Foundation in this program which is designed to fill the gap in providing improved medical care where there is the greatest need. The Foundation makes an annual grant of \$125,000 which is placed in a revolving fund and made available in the form of unsecured loans to physicians desiring to establish practices or to improve existing facilities. Under the program, physicians may receive loans in amounts up to \$25,000. The primary objective is to improve services and facilities in suburban and rural areas. Several of the loans have been made in Oklahoma.

Officials are confident of a favorable ruling from the Internal Revenue Service but found the suspension necessary in view of the indecisive element.

O.S.M.A. Members Assist

Several members of the Oklahoma State Medical Association assisted in the annual Farm Home Conference held recently on the campus of Oklahoma State University, Stillwater, by conducting sessions on various phases of medicine.

Participating on the program were: William Schottstadt, M.D., A. A. Hellams, M.D., William B. Thompson, M.D., Harold G. Sleeper, M.D., all of Oklahoma City; T. A. Ragan, M.D., Charles A. Smith, M.D., both of Norman; T. H. McCarley, M.D., of McAlester and A. M. Brown, Jr. of Perry.

A recent study of physicians's records at the Executive Office reveals that approximately 5% of the O.S.M.A. membership is over 80 years old. Sixty-six physicians are between eighty and ninety and four have passed the ninety mark.

Have You Heard?

W. H. MCBRAYER M.D., of Idabel celebrated his eighty-sixth birthday in August. Doctor McBrayer has been practicing in Oklahoma 57 years.

Membership in the Tulsa County Medical Society has reached a new high of 336, according to President G. R. RUSSELL, M.D.

ELLIS LAMB, M.D., of Clinton was recently awarded a 50-year membership pin by his local Masonic Lodge.

MALCOLM E. PHELPS, M.D., El Reno, visited in Fort Knox, Kentucky, recently where he inspected the Ireland general hospital and an educational program for doctors. Doctor Phelps made the trip at the request of Major General Cyrus W. Hayes, surgeon-general of the army who appointed Doctor Phelps a special consultant.

BARYLE HENWOOD, M.D., formerly of Tulsa, has moved to Collinsville where he plans to enter practice with PAUL HERRWAGEN, M.D.

H. IRELAND STEFFEN, M.D., and his wife, formerly of Oklahoma City, have recently established a home in Enid.

SHELBY GAMBLE, M.D., medical director of the rehabilitation center at Oklahoma A&M in Okmulgee, served as an area consultant in physical medicine and rehabilitation for the Veterans Administration hospitals in Colorado August 1 through 13.

PAUL L. MASTERS, M.D., of Del City was admitted to Mercy Hospital August 12 with an acute virus infection. Doctor Masters' confinement in the hospital was not expected to be a lengthy one.

ROBERT N. SAYLOR, M.D., recently assumed duties as medical officer in charge of the U. S. Public Health Service Indian hospital in Lawton. Doctor Saylor was transferred from the U. S. Public Health Service Indian Hospital in Shawnee.

A. S. NUCKOLS, M.D., Mrs. Nuckols and their 13-year-old daughter, Sue, recently returned to their home in Ponca City from an 18,000-mile vacation. The trip took them sight-seeing across the western states, Mexico, Canada, Alaska and Hawaii.

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in 50 different infections. New
rapid-acting, offer an average of
in half the time—unsurpassed
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Book Reviews

Handbook of Pediatric Medical Emergencies. Second edition, 1956, DeSanctis and Varga. Leatherette cover. Pp. 389, \$6.25. Published by C. V. Mosby Company.

The form of the second edition of this popular book follows very closely the form of the first edition (1951), with the addition of chapters on Metabolic Emergencies, Accident and Poison Prevention, Genitourinary Emergencies and Respiratory Paralysis in Poliomyelitis.

The continued popularity of this book is virtually assured by reason of its contents as suggested in the title. However, as one reads through the various sections one realizes the author's dilemma in preparing a book of this type. As he stated in the preface to the first edition he was continually faced with the choice of presenting therapy only or of presenting a review of signs and symptoms of the rarer emergencies, thereby facilitating their earlier diagnosis.

In a handbook like this, deviations from generally accepted rationale or technic always make one wonder whether brevity is at fault or newer concepts are being introduced. Most of the time, the reviewer had the impression that much was again being carried over from the older standard texts. As examples we might cite the recommended reliance on subcutaneous fluids in severe dehydration (p. 54); the removal of only a small definite amount of fluid (10-12 cc) with each subdural tap (p. 116); the use of intrathecal penicillin in meningitis (p. 102); use of 25 per cent glucose intravenously in asthma (p. 130); the use of the Universal Antidote in unknown poisoning (p. 294) and the recommendation that dilatations in lye ingestion "should be started on the fourth day" (p. 307).

Regarding the use of penicillin, one wonders if new information is contained in the statement that "penicillin in high dosage has also been shown to be of substantial value" in Primary Atypical Pneumonia (p. 131) or that penicillin should be used for its *bacteriostatic* effect on the "streptococcus which lives saprophytically with the diphtheria" (p. 122).

Certain aspects of emergency care are conspicuous by their absence, such as the actual technic of tracheotomy tube care, although the usual statement that the patency of the tube should be maintained is made.

The book in general serves the purpose of a Handbook very well. It contains hundreds of detailed facts and dosages that are always a comfort to have near. As a source of this factual material it can be well recommended.—*T. R. Pfundt, M.D.*

The Care of the Expectant Mother. Josephine Barnes, M.M., F.R.C.S. (England). Fabric binding, \$7.50. Pp. 270, Copyright 1957. Published by Philosophical Library, 15 East 40th St., New York 16, N.Y.

An English author has compiled the outline for the care of obstetrical patients intended for use by the specialist in the field or by the general practitioner to whom such care is entrusted.

The manuscript is divided into three major sections: one on normal pregnancy, one on abnormal pregnancy, and the last on diseases complicating pregnancy. Portions of the information include availability of maternity services in Britain, which while being helpful to the British, makes dull reading for an American.

The management of such complications as the hypertensive pregnant patient is briefly treated and many useful drugs are rather hastily dismissed as of having little value. Many indications for interruption of pregnancy are mentioned so frequently as to lead one to assume this to be common practice.

Causes of malpresentations are presented in a usable outline, though the work by Stevenson in pointing out the importance of the location of the placenta is not taken into consideration.

The chapter on antepartum hemorrhage where septic abortion is discussed, suggests that curettage is never done in such cases, a statement which is usually good advice, but certainly not always the best course. If one carried out some of the author's indications for induction of labor in this country he would be severely criticised.—*Dixon N. Burns, M.D.*

FILM GUIDE *For* PROGRAM CHAIRMEN

Listed below are some of the 16 mm. scientific films available from the American Medical Association Motion Picture Library. The films are available on loan (Service charge basis) to medical societies, hospitals and other scientific groups.

Requests should be made to: Motion Picture Library, American Medical Association, 535 North Dearborn Street, Chicago 10, Illinois.

At least two weeks prior to showing should be allowed for delivery. If the service charge (which includes transportation to user) is to be paid by an institution, a purchase order should accompany the request. The charges are for a two day period and users are urged to return the films immediately after use. They should be returned prepaid and insured for the amount specified on the confirmation.

ANATOMY AND PHYSIOLOGY

A.M.A. No.	SERVICE CHARGE
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- | | | |
|----|--|--------|
| 53 | THE ANATOMY OF THE ARM, FOREARM,
AND THE HAND (1945-48) | \$4.00 |
|----|--|--------|

Silent, color, 1,350 feet, showing time 56 minutes. Prepared by Daniel P. Quiring, Ph.D., and Erna L. Boroush, Cleveland Clinic Foundation.

Illustrates the gross anatomic features of a systematic dissection of the arm of a cadaver.

- | | | |
|----|--|--------|
| 54 | THE ANATOMY OF THE LEG AND FOOT
(1945-48) | \$5.00 |
|----|--|--------|

Silent, color, 2,000 feet, showing time 83 minutes. Prepared by Daniel P. Quiring, Ph.D., and John H. Warfel, Ph.D., Cleveland Clinic Foundation.

Illustrates the gross anatomic features of a systematic dissection of the leg and foot.

- | | | |
|----|--|--------|
| 55 | THE ANATOMY OF THE PERINEUM
(1945-48) | \$2.00 |
|----|--|--------|

Silent, color, 700 feet, showing time 29 minutes. Prepared by Daniel P. Quiring, Ph.D., and Earl L. Lewis, M.Sc., Cleveland Clinic Foundation.

Presents the gross anatomic features of a systematic dissection of the male perineum in the cadaver.

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|----|---|--------|
| 81 | BLOOD STREAMS IN THE BASILAR AR-
TERY (1949) | \$1.50 |
|----|---|--------|

Color, sound, 228 feet, showing time 9 minutes. Produced in collaboration with the Department of Physiology, St. Bartholomew's Hospital Med-

ical College, London.

This film demonstrates the hydrodynamics of blood-flow in the basilar artery under varying conditions.

- | | | |
|-----|---|--------|
| 119 | THE BRONCHOPULMONARY SEGMENTS
PART 1: ANATOMY AND BRONCHOSCOPY
(1955) | \$1.00 |
|-----|---|--------|

Color, sound, 1120 feet, showing time 31 minutes. Prepared by Chevalier L. Jackson, M.D., John F. Huber, M.D. and Charles M. Norris, M.D., Philadelphia. Produced for Pfizer Laboratories by Campus Film Productions, New York.

Defines the bronchopulmonary segments and demonstrates the anatomy of the 18 segments of greatest clinical importance by means of specimens and models. The segmental anatomy concept is related to bronchoscopy by combining oil paintings of bronchoscopic views with models of the clinically important individual segments and groups of segments. The film concludes with cine-endography of the normal bronchi so that the viewer, in effect, looks through the bronchoscope with the endoscopist.

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|----|--|--------|
| 46 | FUNCTIONAL ANATOMY OF THE HAND
(1951) | \$1.50 |
|----|--|--------|

Color, sound, 1,119 feet, showing time 28 minutes. Prepared by the Department of Anatomy, Duke University, Durham, N.C.

This film graphically depicts normal function of the muscles of the hand and forearm as well as the relation of the muscles to the skeletal structure.

- | | | |
|-----|---|--------|
| 105 | PHASE MICROSCOPY OF NORMAL LIV-
ING BLOOD CELLS (1954) | \$3.00 |
|-----|---|--------|

Sound, 985 feet, showing time 27 minutes. Prepared by Richard J. Blandau, M.D., Quinn B. deMarsh, M.D. and Paul Ralph, Ph.D., Department of Anatomy, School of Medicine, University of Washington.

Compares the various circulating blood cells, including the blood platelets and red blood cells, as they appear in a Wright's stained preparation and in the living state when examined with the dark medium contrast phase objectives.

- | | | |
|-----|---|--------|
| 122 | PRINCIPLES OF RESPIRATORY ME-
CHANICS. PART 1 (1954) | \$1.00 |
|-----|---|--------|

Sound, color, 797 feet, showing time 22 minutes. Prepared by Department of Physiology Harvard School of Public Health under a grant from the National Foundation for Infantile Paralysis.

This film illustrates the mechanical behavior of the lungs in normal and pathological states. Using animated drawings and both normal subjects and patients with respiratory conditions,

this film deals with such basic concepts as elastic and resistive properties of the lungs, pressure-volume relationships. Of interest to physicians, medical students, graduate nurses, physical therapists, occupational therapists.

121 STREAMLINE FLOW IN THE VEINS (1954) \$2.00

Color, sound, 361 feet, showing time 10 minutes. Demonstrated by Dr. D. A. McDonald, St. Bartholomew's Hospital Medical College, London. Produced by the Wellcome Film Unit, London.

Streamlined and turbulent flow are demonstrated in a glass model. Reynold's formula giving the critical conditions for the change from one type of flow to another is discussed. By means of dye injected into tributary veins, the type of flow at different points in the rabbit vena cava and portal venous system is observed.

113 WILLIAM HARVEY AND THE CIRCULATION OF THE BLOOD (1928) \$3.00

Silent, 1,144 feet, showing time 48 minutes. Technical Advisors: Sir Thomas Lewis and Sir Henry Dale. Sponsored by Royal College of Physicians, London.

Reproduces dissections and experiments from William Harvey's "Exercitatio Anatomica de Motu Cordis et Sanguinis" (1628). Through experiments with vessels of the extremity, Harvey demonstrates artery-vein continuity and the function of venous valves.

ANESTHESIOLOGY

114 DISASTER ANESTHESIA (1952) \$4.00

Color, sound, 1,233 feet, showing time 35 minutes. Produced by Scientific Film Company, Berwyn, Ill. Sponsored by University of Illinois College of Medicine, Department of Anesthesia.

This is a civil defense training film for teaching dentists and physicians to act as anesthesists for emergency duty in case of disaster. A technic is shown for administering general anesthesia safely and efficiently to huge groups of injured people with improvised equipment and shelter.

1 DYNAMICS OF RESPIRATION (1938 revised 1944) \$3.00

Color, silent, 942 feet, showing time 40 minutes. Prepared by the Departments of Anesthesia, Radiology and Photography, University of Wisconsin Medical School, Madison.

Shows normal respiration, respiration in various stages of anesthesia and in different pathologic conditions.

28 PEDIATRIC ANESTHESIA (1944) \$2.00

Color, silent, 921 feet, showing time 38 minutes. Prepared by Dr. M. Digby Leigh, Department of Anesthesia, Children's Memorial Hospital, Montreal, Que.

For use in demonstrating the technic of anesthesia in children and includes the respiratory and eye manifestations of the stages of anes-

thesia. Especially recommended for experienced anesthesists.

2 REGIONAL ANESTHESIA FOR OPERATIONS ON THE NECK (1938) \$1.00

Silent, 400 feet, showing time 15 minutes. Prepared by Dr. Ralph M. Tovell, Section on Anesthesia, Mayo Clinic, Rochester.

6 THE ROLE OF CARBON DIOXIDE IN CONVULSIONS DURING ANESTHESIA (1942) \$1.00

Silent, 225 feet, showing time 7 minutes. Prepared by Departments of Anesthesia, Radiology and Photography, University of Wisconsin Medical School, Madison.

Demonstrates anesthetic methods and complications. Illustrates effects of carbon dioxide under certain circumstances.

3 SIGNS OF INHALATION ANESTHESIA (1938) \$2.00

Silent, 600 feet, showing time 25 minutes. Prepared by Dr. Henry S. Ruth and Dr. J. Harvey Sigafos, Department of Anesthesia, Hahnemann Hospital, Philadelphia.

Details of signs of inhalation anesthesia with charts presented by Dr. Arthur E. Guedal, Los Angeles. Illustrations of stages and planes of anesthesia.

4 TECHNIC OF BLOCKING SACRAL NERVE (1938) \$1.00

Silent, 400 feet, showing time 15 minutes. Prepared by the Section on Anesthesia, Mayo Clinic, Rochester.

5 THE TECHNIC OF CARBON DIOXIDE ABSORPTION IN ANESTHETIC ATMOSPHERES (1938) \$2.00

Silent, 800 feet, showing time 30 minutes. Prepared by the Department of Anesthesia and Photography, University of Wisconsin Medical School, Madison.

CARDIOVASCULAR

131 ACTION OF THE HUMAN HEART VALVES (1955) \$2.00

Color, sound, 861 feet, showing time 24 minutes. Prepared by Karl P. Klassen, M.D. and Charles V. Meckstroth, M.D., Columbus, Ohio.

The action of normal and abnormal human heart valves is simulated by mounting the fresh postmortem heart and reproducing inflow and outflow pressures of the atria and ventricles within physiological limits. All four valves are depicted. Altered function as well as surgical correction of congenital and acquired valvular lesions is demonstrated.

25 ANGINA PECTORIS (1942) \$4.00

Color, sound, 3,200 feet, showing time 1½ hours. Prepared by Dr. Joseph E. F. Riseman, Boston.

A summary of objective studies. Part I: Clinical Characteristics. Part II: Physiology. Part III: Pathology. Part IV: Treatment. Includes

illustrations of anatomical preparations. Demonstrates measurements of physical activity in evaluating status of this condition and its treatment.

78 CONGENITAL MALFORMATIONS OF THE HEART

Color, sound. Prepared by Robert F. Rushmer, M.D., and Richard J. Blandau, M.D., University of Washington, Seattle. Produced by the Department of Medical Illustration, University of Washington.

Part I. Development of the Normal Heart (1952)..... \$3.00

553 feet, showing time 15 minutes. Presents the embryological development of the heart, first showing stages in development of the heart in the living chick embryo and secondly the morphological development of the heart and the internal development from the single chambered embryonic heart to the four chambered adult heart. The development of the spiral system in the conus arteriosus and formation of the interatrial septum with closure of the foramen ovale are also shown.

Part II. Acyanotic Congenital Heart Disease (1952)..... \$3.00

487 feet, showing time 14 minutes. Shows a number of patients with congenital cardiac defect involving an abnormal movement of blood from the aortic system into the pulmonary system, particularly persistence of the ductus arteriosus. The principles upon which a differential diagnosis can be made are presented with the aid of animation and cinefluororadiographs. Recordings of heart sounds are included.

Part III. Cyanotic Congenital Heart Disease (1953)..... \$3.00

1,025 feet, showing time 28 minutes. Presents the embryology, origin, and the functional significance of congenital malformations of the heart which produce cyanosis.

82 FUNCTION OF THE MITRAL VALVE IN SITU (1952)..... \$2.00

Color, sound, 484 feet, showing time 13 minutes. Prepared by Adrian Kantrowitz, M.D., and Elliott S. Hurwitt, M.D., Montefiore Hospital, New York.

This film demonstrates the action of the mitral valve in the anesthetized dog under conditions that do not depart in any too important sense from normal. The demonstration is well organized and the observer is kept well oriented throughout the discussion by means of diagrams.

115 VIDECLINIC: CORONARY ARTERY DISEASE (1955)..... \$3.00

Sound, 3,800 feet, showing time 1 hour and 47 minutes. Produced by the Smith, Kline and French Medical Television Unit.

This film is a Kinescope of a program which

was presented on closed circuit television February 9, 1955. Videclinic participants from New York, Boston, Cleveland, Chicago and Minneapolis and New Orleans discuss the management of coronary artery disease.

NEOPLASMS

76 CANCER OF THE THYROID GLAND—TREATMENT OF A CASE BY RADIOACTIVE IODINE (1947)..... \$1.50

Color, sound, 250 feet, showing time 7 minutes. Produced for the American Medical Association by Audio Productions, Inc., New York. Photographed at and supervised by the Memorial Center for Cancer and Allied Diseases, New York.

This film shows the diagnosis and management of a case of carcinoma of the thyroid with metastasis to the hip and its treatment with radioactive iodine.

38 EXAMINATION OF THE BREAST FOR EARLY CANCER (1948)..... \$3.00

Color, sound, 590 feet, showing time 20 minutes. Produced for the State of California Department of Public Health and the California Medical Association Cancer Commission.

Portrayal of methods used in physical examination of patients to determine cancer of the breast.

39 MOLES AND MELANOMA (1945)..... \$1.50

Color, sound, 350 feet, showing time 8 minutes. Prepared by Bureau of Medicine and Surgery, U. S. Navy.

The structure and skin cells of benign and cancerous moles are illustrated by animation. Shows the ineffective results with improper removal of a mole and the procedures that insure good results.

95 ORAL CANCER: THE PROBLEM OF EARLY DIAGNOSIS (1953)..... \$2.00

Sound, color, 1,131 feet, showing time 32 minutes. Sponsored by American Cancer Society and National Cancer Institute.

Clinical material illustrates early lesions of the tongue, floor of the mouth, gingiva, cheek, palate, and lip. The technique of biopsy and the method of thorough oral examinations are illustrated.

80 SOME ASPECTS OF ACCESSIBLE CANCERS—RECTUM (1951)..... \$3.00

Sound, 884 feet, showing time 24 minutes. Produced for the Ministry of Health by the Realist Film Unit, London. Principal advisors: The Royal Cancer Hospital, Westminster Hospital and St. Marks Hospital. Made under the general supervision of Sir Standford Cade, F.R.C.S., Malcolm Donaldson, F.R.C.S., and Dr. G. F. Stebbing.

Grounds for suspicion of cancer of the rectum and diagnostic procedures for several cases are

shown. The British method of performing a combined abdominal perineal excision of the rectum is presented.

79 SOME ASPECTS OF ACCESSIBLE CANCERS—SKIN (1951).....\$3.00

Sound, 1,030 feet, showing time 29 minutes. Produced for the Ministry of Health by the Realist Film Unit, London. Principal advisors: The Royal Cancer Hospital, Westminster Hospital, Middlesex Hospital and Mt. Vernon Hospital and Radium Institute. Made under the general supervision of Sir Stanford Cade, F.R.C.S., Malcolm Donaldson, F.R.C.S., and Dr. G. F. Stebbing.

Portrays skin cancer in all its forms and locations with emphasis on the technics of examination. Treatment by radiation and surgery is demonstrated. Patients are shown before and after treatment.

NEUROLOGY AND PSYCHIATRY

65 INTRODUCTION TO APHASIA (1950) ---- \$3.00

Color, sound, 1,125 feet, showing time 31 minutes. Prepared by the Department of Medicine and Surgery, Veterans Administration. J. M. Nielsen, M.D., technical advisor.

Presents an overall definition of aphasia and implements this definition by animated diagrams of the neuroanatomy involved. It explains and presents actual typical cases of each form of aphasia.

120 VIDECLINIC: MIND AND MEDICINE (1955) \$3.00

Sound, 1,650 feet, showing time 45 minutes. Produced by Smith, Kline and French Medical Television Unit.

The problems and the latest weapons developed to fight mental illness are outlined. It covers first, the research aspects of mental illness, including the use of lysergic acid to produce symptoms in normal and abnormal people for study purposes; second, the dramatic use of drugs in the treatment of mental disease, and also reports on the "open ward" system and "therapeutic communities" from Belgium and England.

OBSTETRICS

94 MANUAL ROTATION IN THE MANAGEMENT OF OCCIPUT POSTERIOR AND OCCIPUT TRANSVERSE POSITIONS (1943) \$4.00

Silent, color, 1,100 feet, showing time 32 minutes. Directed by H. J. Holloway, M.D., and E. S. Burge, M.D., Northwestern University.

Position diagnosis, manual rotation of occiput to an anterior position, forceps application and extraction for each of the posterior and transverse positions are explained and illustrated first on a manikin, then by actual delivery.

OPHTHALMOLOGY AND OTORHINOLARYNGOLOGY

57 BRONCHOSCOPIC CLINIC IN KODACHROME (1949).....\$5.00

Silent, color, 1100 feet, showing time 30 minutes (run at 24 frames per second.) Prepared by Paul H. Holinger, M.D., Kenneth C. Johnston, M.D., and Frank J. Novak, III, M.D., Departments of Otolaryngology and Broncho-esophagology, St. Luke's Hospital and University of Illinois.

Portrays the value of, and the indications for, bronchoscopy in the study of diseases involving the tracheobronchial tree, and demonstrates the bronchoscopic appearance of a variety of such lesions.

132 EMBRYOLOGY OF THE EAR (1955)

Color, sound. Presented by the American Academy of Ophthalmology and Otolaryngology with the cooperation of George W. Bartelmez, Ph.D., Carnegie Institute of Washington and Franz Altman, M.D., Columbia University, New York.

PART I. THE INNER EAR.....\$5.00
1080 feet, showing time 30 minutes.

Demonstrates that the ear can be divided into three parts: External, middle and inner ear. The demonstration continues on the inner ear, the otic labyrinth, the otic capsule and the periotic labyrinth.

PART II. THE MIDDLE EAR.....\$5.00
990 feet, showing time 27 minutes.

Deals with the middle ear and the external ear.

PART III. BLOOD VESSELS—ARTERIES.....\$5.00
1188 feet, showing time 33 minutes.

Discusses the blood vessels, arteries, veins, and ends with a summary of the entire subject.

61 EMBRYOLOGY OF THE EYE (1950).....\$3.00

Color, sound, 1550 feet, showing time 43 minutes. Prepared by the American Academy of Ophthalmology and Otolaryngology. George W. Corner, M.D., director and Gordon K. Smelser, Ph.D., technical consultant.

A general picture of the development of the ocular structures. Part I deals with the development of the early stages; Part II the later stages. The last portion of Part II shows the stages consecutively and summarizes all the tissues and their changes.

134 THE EVALUATION OF HEARING IN PRE-SCHOOL CHILDREN WHO LACK NORMAL SPEECH (1954).....\$3.00

Color, sound, 1010 feet, showing time 28 minutes. Prepared by Hollie E. McHugh, M.D., and R. Hall McCoy, M.D., Department of Otolaryngology. Children's Memorial Hospital, McGill University.

Presents the problems in the diagnosis of children impaired in communication, and some diagnostic procedures. With the use of diagrams and patients, it presents rather clearly the diagnostic possibilities with relation to the disorders shown.

- 84 GLAUCOMA: WHAT THE GENERAL PRACTITIONER SHOULD KNOW (1951).....\$3.00

Color, sound, 825 feet, showing time 22 minutes. Prepared by National Society for the Prevention of Blindness.

This film has been made to bring home to the general practitioner the high incidence of blindness due to glaucoma so that he will be on the watch for signs and symptoms of its existence in his patients, to show him how to recognize these signs and symptoms and to point out the necessity of referring such patients to an ophthalmologist for a definite diagnosis and treatment.

- 104 THE STRUCTURE AND FUNCTION OF THE VESTIBULAR APPARATUS (1954).....\$3.00

Color, sound, 749 feet, showing time 20 minutes. Prepared by Richard J. Blandau, M.D. and Newton B. Everett, Ph.D., Department of Anatomy, University of Washington.

Presents the gross and microscopic anatomy of the human utricle, saccule and semi-circular canals. The way in which these structures respond to stimuli resulting from alterations of the body's orientation in space or to a change in deceleration or acceleration is demonstrated by means of animated drawings.

ORTHOPEDICS

- 93 PRINCIPLES OF FRACTURE REDUCTION (1953).....\$3.00

Color, sound, 1,077 feet, showing time 30 minutes. Produced by Churchill Wexler Productions, Los Angeles, for the Veterans Administration.

This film shows such principles as: early reduction, neutralization of displacing muscle pulls, counter-traction, suspension, etc., and shows application of principles to the reduction of fractures in a farmhouse situation where modern equipment is not available.

- 29 SCIATIC PAIN AND THE INTERVERTEBRAL DISC.....\$1.50

Color, sound, 920 feet, showing time 26 minutes. Prepared for the Bureau of Medicine and Surgery, U.S. Navy

This film clearly demonstrates, in a fresh specimen, the function of the disc. It describes the parts of the disc and visualizes the pressure and distortions. A proper examination of a patient is presented and the classical signs and symptoms are demonstrated. The two types of treatment, conservative and operative are also demonstrated.

- 117 SURGICAL APPROACHES TO JOINTS OF THE WRIST (1951).....\$3.00

Color, sound, 1192 feet, showing time 33 minutes. Prepared by LeRoy Abbott, University of California for the Veterans Administration.

Animated diagrams depict the bones, ligaments, muscles, tendons and neurovascular structures with which the surgeon deals in various approaches to the wrist. The sections on anatomy are followed

by operations employing approaches to the volar, radiovolar, ulnar and dorsal aspects.

- 118 SURGICAL APPROACHES TO THE ELBOW JOINT (1950).....\$3.00

Color, sound, 1360 feet, 37 minutes. Prepared by LeRoy Abbott, University of California for the Veterans Administration.

Shows the approach from Anteolateral, lateral and posterolateral angles. Animation and live action show each step of three operations.

- 90 SURGICAL APPROACHES TO THE HIP JOINT (1951).....\$3.00

Color, sound, 1260 feet, showing time 30 minutes. Prepared by LeRoy Abbott, University of California, for the Veterans Administration.

Animated diagrams show the anatomy of the anterior and posterior aspects of the hip joint. Operations employing approaches to the antero-lateral, straight lateral and postero-lateral aspects of the joint are shown. Each is recapitulated in animation.

- 91 SURGICAL APPROACHES TO THE KNEE JOINT (1951).....\$3.00

Color, sound, 1303 feet, showing time 36 minutes. Prepared by LeRoy Abbott, University of California, for the Veterans Administration.

The approaches used in the film are the median parapatellar, the approach for the excision of the medical meniscus, the approach to the lateral compartment of the knee, and an especially well shown dissection of the popliteal space and the posterior knee compartment.

- 92 SURGICAL APPROACHES TO THE SCAPULOHUMERAL JOINT (1949).....\$3.00

Color, sound, 1250 feet, showing time 30 minutes. Prepared by LeRoy Abbott, University of California, for the Veterans Administration.

A combination of anatomic demonstration, animated drawings and operating room technique. The various approaches are first shown by anatomic dissection, then retraced by animated drawings and finally depicted by filming of actual surgical operations.

- 116 SURGICAL APPROACHES TO THE SPINE AND SACROILIAC (1953).....\$3.00

Color, sound, 994 feet, showing time 27 minutes. Prepared by LeRoy Abbott, University of California for the Veterans Administration.

A cadaver is used to demonstrate the surgical approach to the joint and a diagram is used to clarify the steps in the procedure. Approach to the lumbar aspect of the spine is illustrated by an operation on a cadaver. Recapitulation in animation clarifies the steps in the procedure.

PHYSICAL MEDICINE

- 8 CONTRACTION OF ARTERIES AND ARTERIOVENOUS ANASTOMOSES (1935).....\$1.00

Silent, 250 feet, showing time 10 minutes. Pre-

pared by Dr. E. R. Clark, University of Pennsylvania School of Medicine, Philadelphia.

This film visualizes the contraction of arteries and arteriovenous anastomoses as seen through a glass chamber installed in a rabbit's ear.

34 **RADIOTHERAPY: HIGH DOSAGE TREATMENT (1945)** \$2.00

Sound, 599 feet, showing time 15 minutes. Prepared by the United States Office of Education, Washington, D.C.

Illustrates the uses of x-rays and radium in the treatment of cancer.

109 **RECORDING OXIMETERS AND THEIR APPLICATIONS (1953)** \$2.00

Color, sound, 530 feet, showing time 15 minutes. Prepared by John F. Perkins, Jr., M.D. and William E. Adams, M.D., University of Chicago School of Medicine.

This film outlines briefly the principles of operation of ear oximeters, advantages of recording type oximeters over galvanometer types, uses of oximeters in teaching physiology of respiration, in pulmonary functions studies, in thoracic surgery and in post-operative oxygen therapy.

OTHER SUBJECTS

135 **THE CASE OF THE DOUBTING DOCTOR (1956)**.....no service charge

Color, sound, 1060 feet, showing time 30 minutes. Produced by Centron for the American Medical Association.

A newspaper editor golfing with three local physicians discovers an interesting story while listening to a debate on the merits of the A.M.A. and medical societies. The "doubting" doctor, prompted by a bet, sets out to prove his criticisms. Instead, he finds himself taking his first good look at A.M.A. activities which benefit both the physician and the public. Emphasis is not only upon A.M.A.'s activities but also upon the activities of the state and county medical societies.

30 **PHYSICAL DIAGNOSIS (A PRESENTATION OF ADVANCED AND UNUSUAL CASES WITH PHYSICAL SIGNS DEMONSTRABLE BY INSPECTION)**

Color, silent, (17 reels), (1942 revised 1945). Prepared by Dr. Gordon B. Myers, Dr. Fred J. Margolis and Dr. Muir Clapper, Wayne University College of Medicine, Detroit. Following are the titles and the approximate showing time of each reel:

Reel I. Abnormalities in Gait.....\$1.00
396 feet, showing time 16 minutes.

Reel II Other Types of Involuntary Movement\$1.00
330 feet, showing time 13 minutes.

Reels III and IV. Endocrine Diseases with Characteristic Physiognomy.....\$2.00

733 feet, showing time 30 minutes.

Reel V. Abnormalities in Color and General Diseases with Skin Manifestations\$1.00
465 feet, showing time 19 minutes.

Reels VI, VII and VIII. Head and Face\$3.00
1,300 feet, showing time 54 minutes.

Reel IX. Neck\$1.00
365 feet, showing time 15 minutes.

Reels X and XI. Chest.....\$2.00
619 feet, showing time 26 minutes.

Reel XII. Displacement of the Apical Impulse, 307 feet, showing time 12 minutes\$1.00

Reels XIII and XIV. Abdomen, Back and Perineum\$2.00
738 feet, showing time 26 minutes.

Reels XV, XVI and XVII. Extremities\$3.00
916 feet, showing time 38 minutes.

Requests for this film should be submitted in sections according to subject.

64 **SIGMOID, RECTUM AND ANAL CANAL ENDOSCOPIC VIEWS. (Revised 1950)**
(Formerly titled PROTOSCOPIC CINEMA-TOGRAPHY).....\$2.00

Color, silent, 1000 feet, showing time 28 minutes. Prepared by J. Peerman Nesselrod, M.D. and Jay M. Garner, M.D.

Demonstrates protoscopic views of various rectal and colonic diseases as well as the normal bowel mucosa.

Other Sources Available

The Oklahoma State Medical Association also maintains a source list on a great variety of medical films which are not available through the A.M.A. Requests for information on film subjects not listed on these pages should be made to the O.S.M.A. Executive Office.

Progress Report Traces Medicare's First 6 Months

Fiscal operations of military dependents' medical care program ("Medicare") from its inception last December to July 1, 1957, are traced in interim progress report which has been submitted to Congress. Total of hospital claims up to that date was 103,595, for \$10,732,272; in same period, physicians' claims totaled 127,902 for \$8,805,128. Air Force dependents account for 40 per cent of total Medicare load; Navy, 32 per cent; Army, 26 per cent, and U. S. Public Health Service the remainder.

25 YEARS AGO



EDITORIAL

The Progress of Cancer Research and Treatment in the Past Seventeen Years

"Doctor Joseph Colt Bloodgood has recently issued a lengthy statement covering various phases of cancer work since 1915. In a letter accompanying the statement he makes the following statement: *"In regard to cancer,—in view of the fact that its earliest stages in the skin, mouth, and cervix are curable by the proper application of small amounts of radium, all agencies must unite in seeing that properly trained radiologists are supplied to every clinic using these small amounts of radium."*

Doctor Bloodgood notes that in 1915, when he was asked to address the Academy of Medicine in San Francisco on cancer research activities throughout the world, there was so few cancer research workers that it was no trouble to write almost every one of them and go over the chief literature of their experimental work. The following is especially noted among the various stages and activities occurring in 1915. Cancer throughout the world was largely a disease which could be recognized clinically and from its gross pathology. In spite of the great advances made in the microscopic study of the cellular pathology of tumors since Muller, Virchow, and Cohnheim, the microscope was not often used in the operating room to make a diagnosis from Frozen section. In all the operating rooms of the best clinics throughout the world the clinical and gross diagnosis of the operating surgeon was checked with the microscope in the pathological laboratory, and this material is still available for restudy and has been and is being restudied in a large number of clinics. At that time a small number of the medical profession had begun to appreciate the possible value of X-rays and radium in the treatment of cancer. In 1913 the American Society for the Control of Cancer was organized, but Bloodgood believes it is safe to say that the principles of the surgical treatment of cancer were pretty well established by 1895, thirty-seven years ago; deep X-ray and radium treatment between 1915 and 1920. The education of the public has been more or less continuous for almost nineteen years, therefore we have activities in pathology, in operations, in X-ray diagnosis and treatment, in radium and in education.

Bloodgood notes that less attention has been devoted in time, money, efforts and the daily personal thoughts and actions of the physician and dentist, and in the co-operative effort of all those agencies which have helped, and are helping the

medical profession in the primary schools, and this is more important for prevention and cure than all other agencies. The activities in France, in England and in other foreign countries are practically similar to those going on in the United States. He doubts if any one in the United States dies of cancer without the benefit of surgeon, X-rays, or radium, but that the majority are not cured, many not even temporarily relieved because of the lateness of the stage of the disease when the patient sought advice. He has personally studied thousands of histories of patients who sought the advice of the medical profession after they had been warned for some time; he noted the striking fact in those patients, whose malignant disease can be diagnosed clinically, that they have not had a recent diagnostic survey, and the chief cause of delay after they became aware of their symptoms has been ignorance rather than fear.

He concludes that what we need today, in every civilized country, is not so much more radium, or more cancer clinics, but more cases of cancer of the cervix in its early stages; that the majority of obstetricians and gynecologists of today believe that the greatest protection against cancer of the cervix is routine pelvic examinations after the birth of a child. He finds that in this country less than ten per cent of our mothers are so protected.

It is gratifying that he notes that cancer has remained well twenty or more years when the disease involved the skin, lips, oral cavity, larynx, breast, stomach, colon, and malignant tumors of bone and soft parts, this of course in the presence of proper treatment.

One of the chief obstacles to a greater progress today is the feeling among many members of the medical profession in all its departments, that the growth of the health departments—Federal, State, City and County—is really interfering with the practice of medicine in the following ways: Actually curtailing the activities of the medical profession and diminishing their income and influence. In the very few contacts I have made with the general practitioner in the small villages of England, I encountered the same point of view."

Hillcrest Dinner Honors 82 Physicians

An appreciation dinner was held July 12, 1957, honoring the 82 physicians who provided free medical care to 11,703 charity patients at Hillcrest Medical Center's outpatient department for the past year.

The physicians attending were presented certificates of appreciation by Dr. A. Ray Wiley, department director, and Paul E. Taliaferro, president of the board of trustees of the Center which is located in Tulsa.

Coming Meetings

POST GRADUATE COURSE
University of Oklahoma Medical Center
Sept. 11, 1957 3:30 p.m.

HEART FAILURE

First in a series of 10 postgraduate courses.

- 3:30 PATHOGENESIS OF DYSPNEA IN CONGESTIVE HEART FAILURE
 *Richard V. Ebert, M.D.
- 4:20 PATHOPHYSIOLOGY OF CONGESTIVE FAILURE—Wm. E. Jaques, M.D.
- 5:10 ELECTROLYTE DISTURBANCES, CONGESTIVE FAILURE—L. L. Conrad, M.D.
- 5:30 Dinner, Hospital Cafeteria
- 6:30 STRESS & ELECTROLYTES, RELATIONSHIP TO PATHOGENESIS OF CONGESTIVE FAILURE—William W. Schottsteadt, M.D.
- 7:15 PANEL: TREATMENT OF CONGESTIVE HEART FAILURE—Digitalis, Diuretic agents, Ancillary measures
 Moderator: Robert H. Bayley, M.D.
 Paul W. Smith, Ph.D. Melvin L. Clark, M.D.
 William O. Smith, M.D.

*Guest Lecturer, Professor and Chairman, Dept. of Medicine, University of Arkansas; Courtesy of Oklahoma State Heart Association
 Registration: \$3:50 per session; \$25 for entire series includes dinner, Hospital Cafeteria

SOUTHWESTERN CANCER CLINIC **September 20 and 21, 1957** **Ft. Worth, Texas**

The Southwest Regional Cancer Conference will be held September 20 and 21, 1957, in Fort Worth, Texas, with headquarters in the Texas Hotel.

Speakers for the meeting will be: Dr. Mark M. Ravitch, Baltimore; Dr. John D. Reeves, Boston; and Dr. Thomas M. Peery, Washington, D.C.

HILLCREST MEDICAL CENTER **1653 East 12th St., Tulsa, Okla.**

Lectures in Basic Science Given by Faculty Members of the University of Oklahoma School of Medicine.

- Sept. 24—Recent Advances in Viral Diseases of the respiratory System, L. V. Scott, Lecturer.
- Oct. 8—Basic medical psychology, L. J. West, Lecturer.
- Oct. 22—Heart Function: cardiac reserve, A. N. Taylor, Lecturer.
- Nov. 12—Common Spinal Pathways, G. H. Daron, Lecturer.
- Nov. 26—Cerebellar Structures and Function, G. H. Daron, Lecturer.
- Dec. 10—Autonomics: Structure and Function, G. H. Daron, Lecturer.
- Dec. 17—Central Autonomic Function as related to common medical diseases, C. G. Gunn, Lecturer.

Oklahoma Chapter of the
AMERICAN COLLEGE OF SURGEONS
September 27-28, 1957

A meeting of the Oklahoma Chapter of the American College of Surgeons will be held at the Western Hills Lodge at Sequoyah State Park on September 28 and 29, 1957.

The Scientific Program will consist of the winning papers selected from the Oklahoma Association of House Staff Physicians presented at their annual meeting in May, 1957. The papers which will be presented are as follows:

AN EPIDEMIC OF BREAST ABSCESES

—Robert W. Dean, M.D., St. Johns Hospital, Tulsa

SPLENECTOMY FOR CONGENITAL HEMOLYTIC ANEMIA

—Robert Jabour, M.D., Hillcrest Medical Center, Tulsa

EXCISION OF INTERNAL CAROTID ANEURYSM EMPLOYING HYPOTHERMIA AND VASCULAR SHUNT—IN PREGNANT WOMEN (PATIENT IN FIRST TRIMESTER OF GESTATION)

—Karl K. Boatman, M.D., Oklahoma City

CHLORPROMAZINE AS A MASKING AGENT IN INTESTINAL OBSTRUCTION

—Duane A. Barnett, M.D., Ponca City

THE FUNCTIONING CARCINOID SYNDROME

—William R. McCabe, M.D., University of Oklahoma Medical Center, Oklahoma City

STUDIES OF POST-PARTUM PITUITARY NECROSES

—Carl Smith, M.D., University of Oklahoma Medical Center, Oklahoma City

For further information write the post graduate office of the Oklahoma Medical Center, 800 N.E. 13th Street, Oklahoma City, Oklahoma.

18th Annual Meeting
THE AMERICAN FRACTURE ASSOCIATION
Hotel Cortez El Paso, Texas
September 30, October 1 and 2, 1957

The program for the 18th Annual Meeting of the American Fracture Association will consist of round-table luncheons, scientific sessions to which those attending are invited to bring their own X-rays and present problem cases, and planned social hours. Also many scientific and commercial exhibits will be presented.

**A.M.A. Council on Foods and Nutrition
NUTRITION IN PREGNANCY SYMPOSIUM
University of Missouri Medical Center
Columbio, Missouri
Friday, October 11, 1957**

This meeting will provide an excellent opportunity for the physician and members of the allied professions to acquaint themselves with current findings in nutrition and the practical application of these findings to the management of obstetrical patients.

A copy of the program may be obtained by writing: Philip L. White, Sc. D., Secretary, Council on Foods and Nutrition, The American Medical Association, 535 North Dearborn St., Chicago 10, Illinois.

**Grobyson County Medical Society's Second
BLACKFORD MEMORIAL LECTURESHIP
Denison, Texas
November 5, 1957**

Guest speakers for the second Blackford Memorial Lectureship will be Dr. Conrad G. Collins, Professor of Obstetrics and Gynecology, New Orleans, Louisiana; Dr. J. R. Maxfield, Jr., Radiologist, Dallas, Texas; Dr. C. M. Pomerat, Anatomist, Galveston, Texas; and Dr. Edgar J. Poth, Professor of Surgery, Galveston, Texas.

**AMERICAN COLLEGE OF SURGEONS
Sectional Meeting
Stotler Hilton Hotel Doltos, Texas
JANUARY 9-11, 1958**

Dr. Frank H. Kidd, Jr., and a Committee of Dallas Surgeons have planned a well-balanced program of interest to general surgeons as well as surgical specialists. Subjects range from Chemopallidectomy for Parkinson's Disease to Bomb Phenomenology.

All members of the medical profession are invited to attend.

Sectional meetings of the American College of Surgeons draw on surgeons of outstanding ability to discuss problems encountered in daily practice, and to disseminate information about new techniques. Usefulness is the keynote to all College programs, which are planned by local committees answering the needs of doctors within the meeting area. Panels, symposia, papers, medical motion pictures, and question and answer periods characterize the meetings.

Two new features are scheduled for each Sectional Meeting this year: a Fellowship Luncheon, at which a panel of College officials will answer questions about the entire program of College activities, and in turn, pose questions to the audience; and a social, rather than scientific, dinner meeting to which program participants, visiting surgeons, wives and other guests are cordially invited for an informal and pleasant evening of entertainment.

Dr. Idstrom To Be Speaker For X-Ray Technicians Meeting

Dr. L. G. Idstrom, associate radiologist at the Swedish Hospital in Minneapolis, Minnesota, will be the guest speaker for the 11th Annual Convention of the Oklahoma Society of X-Ray Technicians which will be held November 2 and 3, 1957, at the Skirvin Hotel in Oklahoma City.

Doctor Idstrom is well known to the American College of Radiology and the American Society of X-ray Technicians for in 1944 he received his fellowship from the American Board of Radiology and at the present time is a member of the Advisory Committee of the American Society of X-ray Technicians, appointed by the Board of Chancellors, American College of Radiology.

As an interesting and educational hobby, Doctor Idstrom has obtained tape recordings of famous scientists from all over the world in an attempt to get a permanent record of the speaking voices of men who are "famous firsts" in the field of X-ray and atomic energy.

In addition Doctor Idstrom also develops equipment for demonstration purposes. On his visit to Oklahoma, he plans to bring his entirely visual and almost completely automatic electronic teaching model of an X-ray machine.

O.U. Alumni Schedule 5-Year Class Reunions

Every five years, the Oklahoma University Medical School Alumni Association sponsors and makes arrangements for five year class reunions to be held the day before the Annual Oklahoma City Clinical Society meeting.

The classes which will be holding reunions on Sunday, October 27, 1957, in the Persian Room, Skirvin Tower, Oklahoma City, will be those graduating in 1912, 1917, 1922, 1927, 1932, 1937, 1942, 1947 and 1952.

The five year class reunions will be at the same time and same place as the annual O. U. Medical School Alumni festivities. Special tables for the class reunions will be reserved and honored for the occasion. The wives are invited to the festivities which will include four hours of dancing and special entertainment.

Lee K. Emenhiser, M.D., is Chairman of the Class Reunion Committee.

PHYSICIAN PLACEMENT

Anesthesia

Daniel B. Perry, Residence Quarters, Harlem Hospital, New York, N. Y., age 48, Meharry Medical College, 1948, interned at Harlem Hospital, New York and served residency in anesthesia there, veteran, available December, 1957.

General Practice

David L. Mossman, USAH, Orthopedic Department, Ft. Riley, Kansas, age 28, married, University of Vermont, 1954, available upon separation from service, December, 1957.

Robert R. Rupp, 1235 N. Lorraine, Wichita, Kansas, age 30, married, University of Oklahoma, 1956, internship at Wesley Hospital, Wichita, veteran, available, July 1, 1957.

Internal Medicine

Rensselaer W. McClure, Mayo Foundation, Rochester, Minnesota, age 31, married, University of Kansas, 1948, veteran, available July 1, 1957.

Robert W. Datesman, 94 Oak Street, Westwood, Massachusetts, age 30, married, University of Pennsylvania, 1951, residency training at University of Minnesota Hospitals, and Boston Veteran Hospital, Veteran, available in July, 1957.

Joseph A. Ezze, 3215 Nebraska, St. Louis 18, Missouri, age 32, married, St. Louis University, residency at St. Louis City Hospital and St. Louis University Hospitals, veteran, available, July 1, 1957.

Louis K. McCown, 1516 Third Ave., N.E., Rochester, Minnesota, age 33, married, Tulane, 1949, Residency at Mayo Clinic, Veteran, available January 1, 1958.

Bartis M. Kent, 225 Koser, Iowa City, Iowa, age 32, married, Baylor, 1948. Three year residency at Baylor, veteran, available July, 1958.

Obstetrics-Gynecology

John P. Harrod, Jr., 932 E. 56th Street, Chicago 37, Illinois, age 33, married, University of Georgia, 1946, served residency at University Hospital, Augusta, Ga., Duval County Hospital, Jacksonville, Florida and at Chicago Lyons-In Hospital, Board certified, veteran, availability date unknown.

Pediatrics

Marilynn L. Miles, Kemmerer Bldg. Norton, Virginia, age 36, single, Albany Medical College, 1950, residency at University of Michigan, available immediately.

James A. Dugger, 1510 Southern Ave., Kalamazoo, Michigan, age 35, married, University of Oklahoma, 1946, three years residency in pediatrics, veteran, available September 1, 1957.

Surgery

James Firth Alexander, Charity Hospital, New Orleans, Louisiana, age 34, single, Ohio State, 1949, in orthopedic residency training now, veteran, available immediately.

Karl Edwin Blake, 2681 Crosby Avenue, Pittsburgh 16, Pa., age 33, married, University of Pittsburgh, 1948,

CLASSIFIED ADS

OFFICE SPACE for lease. Ten rooms, two lavatories, private parking, air conditioned, ground floor. Will rent half or lease all. 1225 North Walker or call FOrEst 5-4842 or TR 8-3311.

FOR SALE: Complete office equipment and furniture, including x-ray and bucky (2 yr. old) for General Practitioner. May be bought on easy terms. Excellent opportunity for practice in town of 4,500. Long term lease on desirable office space available at low rent. If interested write for complete invoice of equipment, and details of opening for practice. R. O. Smith, M.D., 306 N. Willow, Fayetteville, Arkansas.

FOR SALE: Physician's instruments and office equipment. Mrs. Melvin Fry, 2007 S.W. 15, Oklahoma City, Okla. Phone CEntal 2-9284.

WANTED General Practitioner to give anesthetic in private clinic. Please advise qualifications in first letter. Box D, c/o THE JOURNAL, P. O. Box 9696, Shartel Station, Oklahoma City, Okla.

FOR SALE: Hamilton steelstone suite; mist green color. Consisting of examining table, treatment cabinet, waste receptacle, and stool. Also miscellaneous instruments for general practice use. All in excellent condition, less than two years old. Quentin T. Brooks, M.D., Western State Hospital, Ft. Supply, Oklahoma.

FOR SALE: Six bed, licensed General Hospital and Clinic, serving two cities, combined population 4000, with large trade area. Write Box B, c/o THE JOURNAL, P.O. Box 9696, Shartel Station, Oklahoma City, Oklahoma.

FOR RENT OR LEASE: Over 2000 square feet of office space for rent or lease; good corner location on Britton Road in Oklahoma City. Plenty of parking space. Building can be remodeled and re-decorated to suit needs and taste of physician. Write Box C, c/o THE JOURNAL, P.O. Box 9696, Shartel Station, Oklahoma City, Oklahoma.

WANTED: General Practitioner. Oklahoma license. Salary open. Family residence and maintenance available at nominal cost. Good setup for recent graduate, retired serviceman, or older man seeking regular hours and less strenuous work. Location adjacent to several recreational areas. Contact Superintendent, Oklahoma State War Veterans Home Facilities, Sulphur, Oklahoma.

residency at VA Hospital and Children's Hospital, Pittsburgh, Board Eligible, veteran, available May, 1957.

Urology

John C. Brazos, 406 South Washington, Watertown, Wisconsin, age 36, married, University of Illinois, 1949, interned at Anckee County Hospital, St. Paul, Minnesota, residency at Milwaukee County Hospital, Milwaukee, Wisconsin. Veteran, available upon completion of residency, July 31, 1957.

Deaths

PORTER W. HOPKINS, M.D.

1880-1957

Porter W. Hopkins, M.D., died August 14, 1957, at his home in Enid.

Doctor Hopkins was born in Ireland, Indiana, on August 6, 1880. He was graduated from the Hospital Medical College in Louisville, Kentucky, in 1907; and moved his practice to Enid in 1919.

Doctor Hopkins was a member and past president of the Garfield-Kingfisher County Medical Society which organization recently presented him a fifty year pin. He was also a member of the Oklahoma State Medical Association, the American Medical Association and the Baptist church.

ARTHUR S. RISSE, M.D.

1877-1957

Arthur S. Risser, M.D. of Blackwell died on July 17, 1957, at the age of eighty years.

Doctor Risser was born July 3, 1877, in Summerfield, Illinois, and was graduated from Kansas City Medical College in 1905. He interned at St. Margaret's hospital in Kansas City and did postgraduate work in surgery at Harvard University, Cambridge, Massachusetts. Doctor Risser was licensed to practice medicine in 1905 in which year he moved to Blackwell where he practiced medicine for fifty-two years.

Doctor Risser was President of the Oklahoma State Medical Association in 1926-27 and was elected to Honorary Membership in the organization in 1956. He served as a lecturer in histology and pathology at the University of Oklahoma School of Medicine and also served as President of the Blue Cross Board of Oklahoma.

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Phenobarbital (¼ gr.) 16.2 mg.
Hyoscyamine Sulfate 0.031 mg.

plus

Prophepyridamine Maleate 12.5 mg.
Phenylephrine Hydrochloride 10.0 mg.

Image of the Scientist Among High-School Students

A pilot study conducted by Mead and Métraux¹ indicates that a student thinking of science in the abstract is all for it. "However, when the question becomes one of personal contact with science, as a career choice or involving the choice of a husband, the image (*of the scientist*) is overwhelmingly negative." This is a matter of concern to scientists and since medicine is a satellite of science and dependent on it for its progress it should be a matter of great concern to us.

In discussing this problem Michael,² gives a note on the background of this negative response.

"And very recently H. H. Remmers has reported his findings from a large sample of high-school students, indicating that many do not hold scientists and science in high esteem. Yet it is disturbing to note that while all who are concerned about a shortage of scientists give lip service to the motivation problem, there has not been, to my knowledge, any clear call emphasizing the need for systematic studies aimed at ascertaining the stereotype, and the values underlying them, that students hold about the rewards and disadvantages of careers in general compared with the career of the scientists in particular. Why such studies especially?

"At the risk of laboring the obvious, I will briefly review the relationship between motivation and stereotypes. Among those factors contributing to the direction and intensity of behavior, certainly a crucial one is the perceived consequences of pursuing and reaching a specified goal. There is abundant evidence that these perceived consequences are almost never evaluated in an exclusively objective and individualistic way; the goals are perceived and evaluated in a context of values of the culture in which the person participates. But since people often have no experience before the fact upon which to make first-hand appraisals of the consequences of their behavior, they frequently use instead stereotyped knowledge about what an unexperienced situation will be like—and they evaluate that situation and select their goals in terms of the values their culture assigns to such aspirations and the way of life pertaining thereto.

"Stereotyping is, of course, not in itself bad, but it can be, and for most of us under many circumstances is a serious detriment to a realistic evaluation of situations. Since highschool students have not been scientists—or much of any other type of worker for that matter—their picture of the various ways of life must come to them through the stereotypes presented by both the formal and informal educative processes to which they are exposed. If the values of this society tend to be away from the values popularly perceived as associated with the scientist, the stereotype comprising some student's picture of a life of science may well be distorted enough to deflect them from such a life, especially if they see it as conflicting with the values they subscribe to and with other stereotypes which they may believe about the way of life they anticipate living.

"There are good psychological and sociological reasons—to say nothing of first-hand, personal experiences of many observers of the American scene, including foreign scientists—for believing that the whole trend of our society, the values of our society, are in fact away from the contemplative, away from respect for and concern with the complex, away from a sense of calling, of dedication, of single minded purpose. Not only is the trend away from these values, which are associated with an earlier period of our society—and still are associated with the cultures of most of the rest of the world—but there seem to be clear evidences of a downright negative attitude toward such a way of life as is associated with the 'egg-head' and the 'longhair'."

The position of the physician in the creation of the student's stereotype in medicine is clear. Except for the teacher, he is often the only one even remotely connected with science in the community. He is not free to do and to think as he pleases. He must be ever on his guard to avoid any remark even in jest that might discourage a youngster thinking of medicine or science. To paint a discouraging picture of the basic sciences and the first two years in medicine could be fatal to a budding ambition. We really don't remember that anyway. We remember not the details of anatomy but the wonders of the human body—not the details of physiology but the wonders of the body functioning—not the details of chemistry but amazement at the homeostasis of body fluids.

Surely enough remains of our early impressions that we can in the presence of youth recall our dedication.

"He's a Brain but Not a Square"

There is no higher compliment from one youth to another. To be smart but be a "regular guy" is something special. The students in high school that we would like to reach have been divided into two categories—the "inner-directed" and the "other-directed." The inner-directed student is the one who has the characteristics from which the popular stereotype about scientists derive: "unswerving and selfless devotion to the quest for knowledge."

"The other-directed student,² swayed by the values of his direct and indirect contemporaries, is the predominant product of our times, for better or worse. They are the ones who answered Barnes (*Melvin Barnes, Superintendent of the Oklahoma City Schools*) question with such responses as 'Duke Snider is one of the 10 best-dressed men. If he were a scientist, would he be?' These are the students whose stereotypes about scientists are reinforced by such newspaper descriptions of scientists as '... is a 34-year-old scientist who has been courting laboratory pallor since he was 12 ... His sister had to find him a date for his senior prom. He is still a bachelor ...'

The boy or the girl who is a brain but not a square must be somewhere between the two. Perhaps if we could find some way to bring the inter-directed who perhaps is a brain that is a square and the brain that is not a square in contact with our medical school in their late highschool years we could salvage their talents from the market place, and through them reach some of those in the other-directed groups not yet lost.

1. Image of the Scientist Among High-School Students. Mead, Margaret and Metraux, Rhoda: Science 126:384 (Aug. 30) 1957.

2. Scientists through Adolescent Eyes: What We Need to Know, Why We Need to Know It. Michael, Donald N.: Scientific Monthly. 84:135 (Mar.) 1957.

Diabetes Week

What is Diabetes Week?

It is the third week of November set aside nine years ago by the American Diabetes Association and is dedicated to education for the benefit of the diabetic.

Increased longevity has increased the population of "over 40" persons and likewise increased the number of diabetics. Statisticians have established that we have 2.5 million known diabetics in the United States and at least one million persons who have diabetes and do not know it. It is estimated that there are 4,750,000 potential diabetics in the United States.

The detection phase of Diabetes Week is a means or method of transmitting this information to the general public. It is a public service which the American Diabetes Association is endeavoring to render and one which year after year for the past nine years has been received most graciously by diabetics, relatives of diabetics, friends and acquaintances of diabetics and also the medical profession.

Why this notice or announcement to doctors? Because medical records of patients too many times indicate that doctors have, in the rushed and busy hours of their practice, failed to collect a urine specimen or do a blood sugar on patients, as frequently as they should. Every doctor regardless of specialty very frequently has to deal with the ravages of untreated or neglected diabetics. Diabetic coma, premature cardiovascular disease, retinitis, dermatitis, diabetic gangrene, obesity, malnutrition, difficult to control infections, slow to heal surgical wounds and many other conditions too numerous to mention could be prevented or easily controlled if the patient and the doctor were both fully aware and both cooperative in respect to the management of diabetes. How could preventive medicine be more satisfactorily and easily practiced than by the early recognition of diabetes by both the physician and the patient.

During Diabetes Week there will be many programs arising from national radio broadcasting systems and television systems, calling attention to the public the simple facts. Local, state, county and city organizations and, in some districts, health associations will have detection and education programs during Diabetics Week.

As a member of the committee on Detection and Education of the American Diabetes

(Continued on Page 516)

Scientific Articles

First of a Two-Part Series

CANCER of the LARYNX

ARTHUR H. DAVIS, M.D., F.A.C.S.

Back-ground facts for the General Practitioner with report of 16 cases.

In 1828, according to Broyles,¹ Albus remarked that in general "the prognosis of laryngeal disease is quit unfavorable." In 1890, addressing the Tenth International Medical Congress held in Berlin, Butlin² spoke of extrinsic carcinoma of the larynx as "this dire disease" and recommended that only intrinsic cancer should be treated by surgery.

Over the years the situation changed. In 1939, Chevalier Jackson,³ beyond question the pre-eminent authority in this field, said that considering the hopelessness of malignant disease in some other regions of the body, the patient with carcinoma of the larynx was relatively fortunate. By 1951, LeJeune⁴ was stating that 30 per cent of all patients with the disease were beyond rescue when they were first seen, and in 70 per cent there was more or less hope of cure.

The more hopeful outlook of carcinoma of the larynx has developed from the increased knowledge of the disease and its ways and the more rational and selective methods of therapy which have developed from the increased knowledge. No one, however, could contend that the situation today is satisfactory, especially when it is remembered that this is a disease which lends itself so well to early diagnosis and which, in its early stages, can be cured.

The reasons why the results in carcinoma of the larynx are less good than they should be are not far to seek. Basically, they are, as in all varieties of malignant disease, delay on the part of the patient in seeking medical aid.

Another explanation is the nature of the therapy required for cure when the disease

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has advanced beyond its first stages, as it so often has when the patient is first seen. Cure then must be effected by mutilation, though many physicians forget, as Holinger⁵ pointed out, that the question is not surgery versus irradiation but therapy versus carcinoma. They also forget Clerf's⁶ additional warning, that neither economic nor emotional considerations must sway the surgeon in the advice he offers the patient. Laryngectomy may sacrifice some larynges that may have been saved by thyrotomy, but it saves lives that would have been sacrificed by conservative measures. The inclination to conservatism, he concludes, or the lack of courage, may lose the life that there is only one chance to save.

Carcinoma of the larynx is not a frequent disease. Certain of the large clinics have accumulated data on hundreds of cases, but these series are small compared to the thousands of cases of other types of cancer, such as of the stomach and more recently the lung, which have come under observation. The average laryngoscopist sees only a few cases in the course of his whole professional life. The 16 cases which form the background of this paper, for instance, have nothing noteworthy about them except that

they are typical in onset, pathologic distribution, and, unfortunately, end results.

These cases are also typical in another important respect. Before they came under observation, these patients had consulted other physicians. Without exception they had been treated for longer or shorter periods of time by symptomatic measures, including sprays, gargles, lozenges, and, of course, antibiotics, though it is hard to conceive of any influence even miracle drugs might exert on hoarseness, the symptom for which every one of these patients sought relief.

This is not an unusual experience. Friedberg and Wallner⁷ analyzing their 116 cases of carcinoma of the larynx from this standpoint, pointed out that at least 18 had been treated symptomatically, "irrelevantly," or by measures indicative of inadequate examination.

At the present time we do not know how to prevent carcinoma of the larynx. Laryngologists make mistakes, and many of them, in diagnosis and more often in therapy, but it is rare indeed for them to institute symptomatic measures without first thoroughly investigating the patient. The chance for improvement in results lies, therefore, in the education of the general practitioner, who sees so many of the patients first, in the knowledge of this disease.

This paper is based upon a comprehensive review and analysis of the literature of carcinoma of the larynx for the 10-year period ending June 1, 1955, as well as a review and analysis of a representative number of earlier basic reports.

Historical Note

There is probably no more extraordinary story in the history of medicine than the development of the diagnosis of carcinoma of the larynx by biopsy and the development of the various techniques of management. Even when one makes allowances for the limited knowledge of earlier days, the bitterness of the arguments over biopsy and laryngofissure and the apparently blind obstructionism of the great names in laryngology seem almost incredible. The strong feelings which were aroused by this disease even through

the twenties of this century, and the important part—though it needs no further proof—played by Chevalier Jackson in the development of the present knowledge and therapy of carcinoma of the larynx. The sound wisdom and judgment and quiet sanity of this man are doubly impressive in the welter of charge and counter-charges that continued for almost fifty years, and every event in the story seems to lead up to the publication in 1939 of the monograph that is still the authoritative presentation of the facts of this disease.³

One of the first comments that might be made on the story is that when Trousseau, in 1837, reported the first case of carcinoma of the larynx, the disease was present in association with tuberculosis. He made the distinction between the two co-existing diseases, and that is well worth remembering for, as will be pointed out shortly, they still occur in association and the differentiation is highly important.

Another interesting point in the historical story is the opposition to biopsy, which is now the cornerstone of diagnosis but which had as much difficulty becoming accepted as any of the therapeutic measures. Part of the original trouble, of course, was the inefficiency of the early techniques, as a result of which the specimens were unsatisfactory. This method also received a blow, from which it did not recover for many years, when the Crown Prince of Prussia died of carcinoma of the larynx after the first biopsy specimen had been pronounced benign, and by the great Virchow at that. Today, as Jackson says, the specimen would have been secured by direct laryngoscopy, not by the indirect technique; and the first specimen, if it had been negative, would not have been accepted as conclusive. The political as well as the medical implications of this case were numerous, but the net result was that the recognition of the essential character of biopsy in carcinoma of the larynx was set back many years.

At that it seems curious to find such violent opposition to what seems so rational and useful a measure, especially when the alternative was that John N. Mackenzie advocated in 1900, total laryngectomy on gross

appearances alone. The following year, at the meeting at which Jackson stated that early diagnosis of carcinoma of the larynx was impossible without the microscope, Mackenzie went on record as "entering an earnest protest against the reckless removal of portions of a suspected malignant growth for microscopic examination." Even after de Santi had demonstrated the slow and scanty lymphatic circulation of the larynx, and Jackson and Semon had pointed out that this anatomic fact prevented dissemination of carcinoma after biopsy, Mackenzie was unimpressed. In 1923, when Jackson advocated biopsy for precancerous conditions of the larynx, he put his finger upon the reason for the long delay in the general acceptance of the method. Success, he said, comes only with continued practice and the development of manual dexterity, and many of the reported failures of biopsy were actually due to an "undeveloped" technique. The same explanation, for that matter, holds for some of the reported failures today.

The importance of the development of laryngoscopy in the knowledge and treatment of carcinoma of the larynx is pointed out by Broyles.¹ It was in 1854, exactly a hundred years ago, that Garcia, a French instructor in singing, discovered how to inspect the interior of the larynx. The paper he read on the subject before the Royal College of Surgeons was received "with apathy and incredulity," but Turek of Vienna and Czermak of Budapest saw the possibilities of the method, made some improvements in the original techniques, and gave demonstrations of it all over Europe. This, as Broyles says, was the real beginning of medical laryngoscopy. Up to 1850, he continues, Ehrman was able to collect only 31 records of laryngeal tumors in all the medical literature. Bruns, in 1854, collected 100 cases. Between that date and 1899 Semon collected 12,297, of which 1,550 were malignant.

Experimental laryngectomy antedated the knowledge of carcinoma of the larynx, but clinical laryngofissure antedated clinical laryngectomy. The first patient on whom laryngofissure was performed by Sands in 1863, died of carcinoma of the kidney after living for two years without a recurrence.

For many years the debate over its merits continued, with the arguments chiefly weighted against it. Durham in 1872 said that its difficulties and dangers had been over-stated, but in 1883, so well-informed a laryngologist as Butlin said, "Not the slightest encouragement is afforded by published accounts to induce one to perform the operation by thyrofissure." Three years later, however, swayed by the reasoning of Semon, he began to use the operation in strictly intrinsic cases, and both of them had a number of survivals to their credit in spite of what now seems the completely unsatisfactory technique they employed. Their results did not convince their associates. In fact, the emotionalism which still plays its part in the management of carcinoma of the larynx was apparent fifty-odd years ago, though it concerned laryngofissure, curiously, and not laryngectomy. In 1900 John N. Mackenzie was willing to advocate total laryngectomy, along with excision of all the tributaries of the neck, whether diseased or not, on mirror appearances alone. In 1902 we find him stating, without the support of any clinical data, that when good results were secured in such an incomplete and "insurgical" operation as laryngofissure, "two mighty possibilities should be forever borne in mind: mistakes in diagnosis and the simple accident of good fortune." By this time, of course, too many cases had been successful to be explained by either reason.

In 1904 Chevalier Jackson took up the cudgels for laryngofissure, advocating proper selection of cases and introducing many improvements in anesthesia and surgical technique, including en masse instead of piecemeal removal of the neoplasm. In 1906 Mackenzie returned to the attack with even greater violence. Without intending to do so he gave the impression that anyone who did anything less than a total laryngectomy committed a crime. Over the next several years laryngofissure won acceptance in Great Britain, thanks chiefly to the advocacy of St. Clair Thomson, but in the United States, as Jackson says, articles on carcinoma of the larynx, if they did not condemn the operation, gave the impression that it did not exist. It was chiefly due to Jackson's own teachings and demonstrations that laryngofissure finally came to occupy its

proper place in America in the management of laryngeal cancer.

Laryngectomy, although it is essentially a mutilating operation, was accepted far more readily than the more conservative laryngofissure. The mortality of the first operations was very high and the results were not good. In the 108 operations performed between 1876 and 1886 (collected by Kackenty), there were only 21 cures. In the 186 performed between the latter date and 1901 there were 69 cures. The mortality was still extremely high, the causes of death being chiefly bronchopneumonia, sepsis and cardiac failure. In 1908 Semon thought that the mortality and the subsequent "deplorable and even suicidal mental state of the patient"—granted, of course, that he survived—provided further arguments for the use of laryngofissure. In 1909 Delaven said that laryngectomy had "added nothing to the sum total of human life." The mortality of the early operations was not hard to explain: Until 1915, when Jackson began to advocate careful selection of cases for it, laryngectomy was performed on patients on whom it could not possibly have succeeded. Today the mortality is not more than two or three per cent in good risk cases, and it is illuminating and instructive to see how men with large experience in the field have progressively reduced their own death rates as their experience with the operation has increased.

A word, finally, might be said about the use of irradiation. The initial results of therapy were uneven and generally bad. The explanation was simple, technical inexperience and faulty selection of cases. In the end, as in all other therapeutic regimens, it remained for Chevalier Jackson to point out that this agency, like all others, had its own special value and that good results could be accomplished with it when it was correctly used.

Incidence

Until carcinoma becomes a reportable disease we shall never know its prevalence at any given time. This is particularly true on the varieties in which the incidence is small. Carcinoma of the larynx is variously stated to constitute from two to four per

cent of all carcinoma. According to Jackson,³ it stood seventh in 1939. At that time, in England, there were 21 deaths from carcinoma of the stomach to every 1.8 deaths from carcinoma of the larynx. In the United States, the ratio was 43:1.

During the six-year period ending in 1951, reports from the National Office of Vital Statistics showed more than 10,850 deaths from carcinoma of the larynx.^{8,9} The number rose from 1,747 in 1946 to 1,884 in 1949 and fell to 1,835 in 1951, which is not a significant decrease. In 1951 there were 22,513 deaths from all varieties of neoplasms of the respiratory system which were either specified as primary or were not specified as to whether they were primary or secondary.⁹ Carcinoma of the larynx thus accounted for about eight per cent of the deaths in this group in that year. A more extended study of the U. S. Vital Statistics—Special Reports shows that the disease is undoubtedly increasing, as would be expected with the increase that has occurred in the general longevity, but it has exhibited no such spectacular increase as has occurred in carcinoma of the lung.

In one of the hospitals in this locality there were 103,794 admissions for all causes between 1949 and 1953 inclusive. Admissions for carcinoma of the pharynx and larynx over this period totaled 100, ranging from 15 in 1949 to 22 in 1952 and also in 1953. There were seven deaths in the hospital from this cause.

This is obviously an infrequent disease in respect to both hospital admissions and hospital deaths, though neither item, of course, is truly representative. Hospital deaths are particularly unrevealing, now that the mortality after surgery for carcinoma of the larynx has become so low. Some patients are admitted only for terminal care, which, if Latella's¹⁰ figures are typical, is all that many persons with this disease ever have. In the 117 deaths which he analyzed, 44 patients had had only terminal care or no local care at all.

Age and Sex. There is no question about the preponderance of carcinoma of the larynx in men, the ratio being variously reported as from 1:8 to 1:12. In the writer's

series there were 15 men and one woman. In the 688 cases reported by Jackson and Jackson¹¹ in 1942 there were 635 men, a ratio of more than 9:1.

The disease is infrequent before 25 years of age and most cases occur after the age of 40. Jackson³ mentions its occurrence, however, at the age of three. Harmer¹² observed it in a boy 9½ years old. Walsh and Beamer¹³ treated two children who were 12 and 13 years old, respectively, and in both of whom the transition from benign papilloma to malignancy occurred under careful observation. In the 16 cases which form the background of this paper the age range was from 32 to 80 years, which is typical of far larger series.

Etiologic Factors

According to Jackson,³ the etiology of carcinoma of the larynx may be expressed in the form of an equation:

A(ge) plus S(ex) plus senile C(hanges) in the epithelium plus I(rritation) plus F(rustrated) repair plus A(lcohol) plus T(obacco) plus H(eridity) plus XYZ (unknown factors) equal ETIOLOGY.

As one examines these factors, however, it becomes perfectly evident that some of them are of trifling importance and that there are very few of them which really explain. We know, for instance, that changes take place in the epithelium with advancing years and that there is a greater vulnerability to cancer as age increases, but it is not clear why carcinoma of the larynx strikes at such a minor proportion of the aging population. Similarly, we have no way of knowing why men are affected rather than women.

About heridity there is little more to be said than that cancer susceptibility and cancer resistance are hereditary Mendelian characteristics. It is true that frequently no inquiries at all are made into the family history, but when they are, they are not usually illuminating. Clerf¹⁴ is almost alone in putting great stress on this factor; in 1940 he reported that in 41 of 250 cases which had come under his observation there was a history of cancer of some part of the body in two generations.

Alcohol is not regarded as a factor of

great consequence. A large proportion of the population drinks socially, and in this group are some heavy drinkers and some alcoholics. Naturally, these persons are represented among patients with cancer of the larynx.

Opinions differ as to the influence of tobacco in the etiology of the disease. Because smoke (not nicotine or tobacco in the natural state) constitutes an irritative factor in the production of chronic laryngitis Jackson³ finds it logical to suppose that it is also a factor in the localization of malignant growths in the larynx. Clerf,⁶ in 1948, remarked that while the majority of the 633 patients whom he and his associates had observed over a 10-year period smoked moderately or to excess, they saw no relation between smoking and carcinoma of the larynx, though they had observed an increase in the incidence of keratosis.

Again, as in the question of the use of alcohol, we are confronted with the fact that today the average man, and many women, smoke, and many of them smoke heavily. Some of them are therefore bound to appear among patients with carcinoma of the larynx. In the writer's series 14 of the men were life-time smokers, though two of the men smoked cigars and not cigarettes. An 80-year-old man had never smoked. A 32-year-old man, at the other extreme of the series, smoked two packs of cigarettes a day. The single woman in the series, 63-years-old, had never smoked.

It may be that the present investigation of cigarettes as a possible factor in the etiology of carcinoma of the lung will throw some light upon the relationship of smoking to carcinoma of the larynx. At present, the relationship is chiefly that of association, or, to put it differently, of a possibility that still requires proof.

It is well known that the usual location of carcinoma of the larynx, which is usually of the squamous-cell variety, is in that part of the larynx most subject to irritation from excessive use of the voice. This factor is present in some cases of the disease but not in the majority. The affected part of the larynx is also the part most exposed to irritation and trauma from the influx of air

laden with dust, smoke and other irritants which are now so common in our cities and which many observers believe will eventually be found to be more responsible than smoking for both bronchogenic and laryngeal cancer.

There are a number of possible miscellaneous etiologic factors, but they are present in too few cases to be of any significance. Jackson's³ concept of "frustrated repair" is an illustration. Holinger and Rabbett¹⁵ reported a case in which previous irradiation therapy was thought responsible for the development of malignancy. King and his associates¹⁶ reported a case in which primary carcinoma of the larynx appeared 11 months after administration of a thyroid-ablating dose of I¹³¹ for carcinoma of the thyroid and mentioned a similar case reported by Trunnell and his associates. If surgical thyroidectomy had been done first, King and his group reasoned, the dose delivered to the larynx would have been negligible. It may be, as they suggest, that to avoid similar untoward accidents, thyroidectomy should be done routinely before an attempt to treat metastases from a thyroid malignancy with irradiated iodine.

Precancerous Conditions. At the present time the only entirely established etiologic factor, and the only factor, incidentally, which is subject to therapeutic control, is in the group of so-called precancerous conditions, including papilloma, pachydermia, leukoplakia and keratosis. All of them are primarily benign, but it is well known that all of them may also become malignant. The transition, furthermore, has been repeatedly observed in too many patients over too long periods of time to permit the speculation that the original diagnoses were in error and the condition was originally malignant.

The transition, it is true, does not occur very often, which eliminates these precancerous conditions as the universal etiologic factor which we shall, perhaps, eventually discover. There is no way of knowing in which case, or when, in a given case, the lesion will cross the line from benignity to malignancy. Attention has already been called to the proved transition from papilloma to carcinoma in the two children re-

ported by Walsh and Beamer.¹³ Fourteen biopsies were negative in the first case over a period of 11 years and an unstated number were negative in the second over a period of ten years. Many supposed papillomas are malignant from the beginning, but the length of observation in these two cases does not permit that speculation in them.

All of these conditions require repeated observation. This holds true whether biopsy has been reported negative or whether, as is the preferred mode of management, the lesions have been excised, for recurrence is always possible. If the procedure is limited to biopsy, it should always include the deeper cells, to rule out possible invasion of the submucosal layer. In most instances intralaryngeal extirpation in toto is possible. Be this as it may, Friedberg and Wallner's⁷ experience points up the danger of procrastination in handling these conditions: 19 of their 31 patients with cordal carcinoma had definite evidence of leukoplakia, which was bilateral in nine cases. The generalization is clearly warranted that the physician who trifles with this and similar conditions also trifles with his patients' lives.

Classification

In its essentials, the classification of carcinoma of the larynx has been agreed upon for almost 80 years. In 1876 Isambert, in a report of five cases, classified them as intrinsic, extrinsic and subglottic. This classification has been both contracted and expanded since, but the essential differentiation of intrinsic and extrinsic has never been lost, though both the nomenclature and the inclusiveness of the terms have varied, as the illustrations to be cited indicate.

Walsh¹⁷ prefers the following classification:

1. Intrinsic carcinoma, which is confined to the true vocal cords.
2. Endolaryngeal carcinoma, which affects the structures within the laryngeal box, that is the ventricles, ventricular bands, arytenoids and the interarytenoid space. It also includes those cases of carcinoma of the vocal cord which have spread across the anterior commissure, with or without fixation of the cord or the arytenoid.

3. Subglottic carcinoma.

4. Extrinsic or extralaryngeal carcinoma.

Orton¹⁸ believes that the whole picture would be clarified if carcinoma of the larynx were considered in two large groups:

1. Epilaryngeal carcinoma, which includes the epiglottis, arytenoid, aryepiglottic fold and pyriform sinus.

2. Hypopharyngeal carcinoma, which includes post-cricoid growths and growths on the lateral or posterior walls of the pharynx.

This nomenclature, Orton says, would indicate the site of origin of the tumor and also imply the surgical problems involved.

Friedberg and Wallner⁷ prefer to use the term cordal carcinoma instead of intrinsic carcinoma for tumors confined to one or both vocal cords, without impairment of mobility. The term endolaryngeal is preferred for tumors which involve the true cord, the ventricle or the ventricular band, or which extend just inferiorly from an initial cordal origin. The true cord is usually though not necessarily fixed. Subglottic tumors are regarded as a separate entity then may extend superiorly to involve the true cord or inferiorly to the upper tracheal area. The terms extracordal and extrinsic are used synonymously to denote a primary lesion of the epiglottis, arytenoid, aryepiglottic fold or pyriform sinus.

Some of these terms may, perhaps, be clearer and more explicit than others, but what it all adds up to is that there are two essential varieties of carcinoma of the larynx, intrinsic and extrinsic, and that the classification of the growth determines, in large measure, the therapy employed and the end-results secured.

Pathologic Process

The recorded location of carcinomas of the larynx varies from series to series. According to Clerf,¹⁴ the anatomic distribution, in the order of descending frequency, is the vocal cords, epiglottis, subglottic area, aryepiglottic fold, ventricular band, ventricle and arytenoid. According to Jackson,³ the order in intrinsic carcinoma is the vocal

cords, ventricle, ventricular bands or inner aspects of the inter-arytenoid region, while extrinsic carcinomas are located in the epiglottis, aryepiglottic fold, arytenoid, pyriform sinus, and that part of the posterior laryngeal wall which forms the anterior wall of the hypopharynx. In Friedberg and Wallner's⁷ 116 cases, the location was cordal in 31, 26.7 per cent; endolaryngeal in 18, 15.5 per cent; subglottic in nine, 7.7 per cent; and extracordal or extrinsic in 58, 50 per cent. In the writer's 16 cases, the lesion was intrinsic in 14 and extrinsic in two.

In advanced cases it is not always possible to determine the exact site of the origin, and this fact may account for the considerable discrepancies in some of the recorded series.

Since most carcinomas of the larynx arise in the vocal cords it is natural that most of these neoplasms take the form of squamous cell carcinoma. Both anatomically and pathologically carcinoma of the larynx is therefore a favorable disease.

The vocal cords are a highly favorable location for two reasons. The first is the structure of the laryngeal box, which, because it is composed of hyaline cartilage, serves as an efficient barrier against local extension. Intrinsic carcinoma, until ulceration and mixed infection occur, cannot make its way through this cartilaginous wall and delay in treatment is therefore relatively less serious than it is in less favorably located growths elsewhere in the body. It is another sad commentary on our management of this disease that in spite of its favorable location in most cases, carcinoma of the larynx has so often extended when the patient is first seen.

The second barrier against extension of intrinsic carcinoma of the larynx is the regional lymphatic system (Fig. 5). Lymphatic drainage is almost non-existent in the elastic tissue of the vocal cords and is slight in their supportive tissue. As long, therefore, as the tumor remains intrinsic in the cord, lymphatic extension is minimal. Once it begins to spread, the situation is very different. Above and below the level of the cords there are two lymphatic systems. The lymph channels of the upper system drain

the ventricles and the ventricular bands, are grouped near the aryepiglottic folds, and make their exit from the larynx between the thyroid cartilage and the hyoid bone, whence they drain into the superior deep cervical nodes. The channels of the lower (subglottic) system pass anteriorly and out through the cricothyroid membrane to anastomose with the lymphatics of the trachea. At the posterior commissure there is a rather free anastomosis between the systems above and below the glottis. The lymphatics that pass out through the cricothyroid membrane collect into the prelaryngeal lymph nodes.

It is due to the special lymphatic distribution, the slowness of lymphatic drainage, and the restraining presence of the laryngeal box of hyaline cartilage that carcinoma of the vocal cord remains strictly local for so long, is so slow to metastasize, and in its early stages is so favorable to surgical treat-

ment by simple, non-mutilating measures. These considerations hold, however, only when the patient is seen before the disease has begun to spread. Once that happens and it has become extrinsic, it is no longer favorable.

The first extension of intrinsic carcinoma of the larynx is along the free margin of the vocal cord. Later it spreads to the anterior or posterior commissure or burrows under the surface of the cord involved, or both cords. Eventually it may involve all the soft tissues of the laryngeal box. In most cases, and always in the cases located in the anterior half of the larynx, the growth first makes its appearance external to the laryngeal box in the prelaryngeal gland, which lies directly over the cricothyroid membrane. Anatomically, this is what would be expected. From the prelaryngeal nodes lymphatic drainage is to the middle and

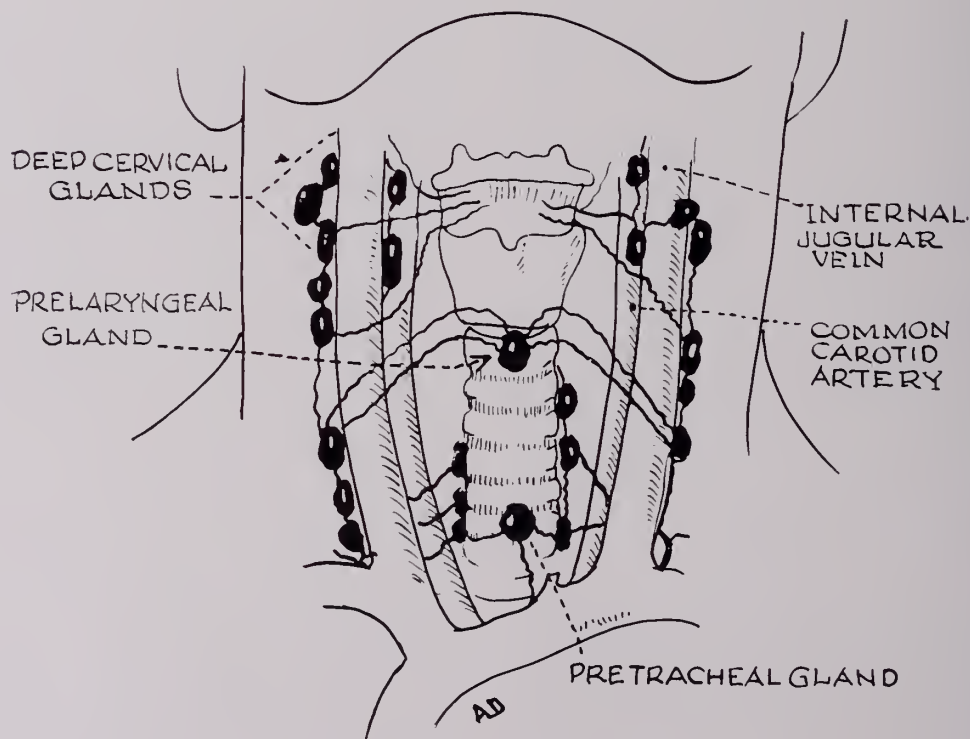


Figure 5

lower deep cervical nodes to the pretracheal and possibly the paratracheal lymph nodes. Similarly the lymphatic drainage from the upper portion of the larynx is to the superior deep cervical nodes. In other words, the lymphatic drainage from the vocal cord itself, where most cancers originate, is small, but that from the extrinsic larynx and the whole pharyngolaryngeal area is considerable, and there are many direct metastases into the juglar chain. It is these anatomic facts which make it impossible to consider cervical lymphadenopathy present in a patient which carcinoma of the larynx as anything but metastatic.

Epiglottic carcinoma, which is uncommon, invades the pre-epiglottic space and metastasizes to the submaxillary and submental nodes as well as to the superior deep cervical nodes. Subglottic carcinoma tends to originate in the area near the anterior commissure, then invades the cords, and thence metastasizes to the inferior deep cervical nodes.

Broder's grading of carcinoma is usually accepted for carcinoma of the larynx. According to Konzelmann,¹⁹ in grade I of these tumors 25 per cent of the cells are undifferentiated, in grade II, 50 per cent, in grade III, 75 per cent and grade IV up to 100 per cent. Davis²⁰ points out, and mentions Colledge's agreement with him, that it is entirely possible for the surface of a tumor to be composed of grade I tissue while in the depths grades III and IV are represented.

Carcinoma in Situ. Carcinoma in situ is relatively infrequent. It was present in 29 of the 312 consecutive carcinomas of the larynx observed by Altmann, Ginsberg and Stout,²¹ and was intrinsic in 27 out of 29 cases. Miller and Fisher²² believe that it is increasing in frequency, particularly in cases in which the diagnosis of carcinoma is not apparent clinically and can be made only by biopsy. In their 13 cases, in patients ranging in age from 29 to 78 years, there were only two instances in which the gross appearance suggested malignancy. In the cases observed by Altmann and his group, however, the malignant process, as so often happens, proved more extensive at operation than it had seemed clinically.

Distant Spread. Sawyer and his associates²³ quote Terracol and Bringier's description of carcinoma of the larynx as a tumor which kills "on the spot" and Rubenfeld and Kaplan²⁴ state that except for metastases to the neck the literature is "conspicuously free" of reports of distant spread of laryngeal tumors. These statements are generally true.

In the order of incidence, Sawyer and his associates state that after cervical extension, metastases appear in the respiratory tract and pharyngoesophagus, and then as blood-borne metastases, which are unusual. The immediate source of their interest was a personally observed, apparently blood-borne metastases which caused intestinal obstruction in the large bowel. It appeared 33 months after the first symptoms from the neoplasm and eight months after laryngectomy. These same observers also cite Terracol and Bringier's review of the international literature in 1948: They found only 14 records of multiple blood-borne metastases only eight of them confirmed histologically. They were, variously, to the liver (four), kidneys (three), lungs, esophagus, pericardium, cerebellum, hypophysis and sella turcica, soft palate, temporal bone, sternum, clavicle, scapula, spine and femur. Terracol and Bringier also reviewed 21 cases of solitary metastases to the digestive system, only one of which, probably implanted, was proved histologically. Rubenfeld and Kaplan report two cases of distant spread from carcinoma of the larynx, one to the axilla and one to the skin of the chest wall. In one of the writer's cases there was a similar spread to the chest wall. In the case of axillary metastases reported by Rubenfeld and Kaplan the first evidence of disease was metastases to the neck.

Although metastases to distant areas in carcinoma of the larynx are always said to be extremely uncommon, Latella's¹⁰ observations in 38 necropsied cases suggest that if complete autopsies were performed more often, this generalization might be overturned. In these 38 cases the cervical nodes were involved in 27 cases, the hilar nodes in eight, the lung in eight, the thyroid in four, the liver and the kidneys in three cases each, the esophagus in two cases, and the bones,

spleen, adrenal glands, jejunum, mesenteric nodes and the submaxillary glands in one each case. In 79 fatal cases in the same series in which autopsy was not performed, metastases were known to have occurred in the cervical nodes in 29 cases, in the lungs in six, in the skin in two, and in the spinal cord, pancreas, bone and brain in one case each.

Diagnosis

History. The diagnosis of carcinoma of the larynx rests upon histologic examinations of a biopsied specimen, but it begins with a carefully taken history. Jackson,³ who believes that carcinoma of the larynx, as a clinical entity, seldom develops in a previously normal larynx, says that the patient, if the questioning is persistent enough, will almost invariably be found to have a history of hoarseness, laryngeal cough, laryngeal fatigue, or a habit of clearing the throat before speaking, and this history will extend over a far longer period than cancer could possibly exist without killing the patient.

The precise symptoms depend upon the location of the growth. In carcinoma of the vocal cords hoarseness, as would be expected, is always the most frequent symptom and always the earliest symptom. It is exceptional, in fact, for carcinoma in this location to exist without it, which makes it peculiarly unfortunate that long-continuing hoarseness is so often ignored.

In a growth located above the glottic level anteriorly, on the other hand, carcinoma may be present for a long time without hoarseness or any other symptom. In all cases of intrinsic carcinoma the voice becomes more and more affected as the growth increases in size, and eventually it becomes rasping and wheezing. In the 16 cases observed by the writer hoarseness had been present in every instance for periods ranging from four months to a year, and in one instance the voice had practically disappeared.

Pain is not an early symptom of carcinoma of the larynx. It does not occur until the nerve supply is affected. A characteristic of ulcerated laryngeal carcinoma, as well as of a number of other regional ulcerative dis-

eases, is pain in the ear, for which the ear itself offers no obvious explanation. Dysphagia and odynophagia are other late symptoms. The former, according to Jackson,³ occurs in postericoidal disease and the latter in postericoidal and epiglottic disease.

In disease which begins extrinsically the symptoms are limited to a sense of discomfort in the throat, perhaps with the feeling that a foreign body or lump is present. In more advanced stages there may be hoarseness, hemoptysis, dyspnea and dysphagia.

How treacherous the extrinsic type of disease may be, with its lack of symptoms and its development in an area of abundant lymphatic supply, is shown by Friedberg and Wallner's⁷ series. In five of their 58 cases of extracordal disease painless swelling of the neck was the first manifestation and 20 patients in all had cervical metastases in two instances bilateral. As a matter of fact, the general and external examination in carcinoma of the larynx is usually negative unless cervical metastases has occurred or perichondritis is manifested by tenderness in the anterior portion of the neck.

Roentgenologic Examination. No clinical laboratory technique is of any value in the diagnosis of carcinoma of the larynx. A flat plate of the chest is, however, always a precaution in any type of malignant disease, even the variety in which metastases are unlikely.

Special types of roentgenologic study are useful in special cases, particularly those in which the diagnosis is obscure. Lateral views of the neck, for instance, taken after air inflation by the Valsalla method, demonstrate the soft tissues clearly, provide a profile view of the vallecula epiglottica, the epiglottis, the prevertebral space and the trachea, and also show, although less clearly, the ventricle and the subglottic space. Anterior-posterior planography combined with fluoroscopy reveals abnormalities of the cord, the ventricle, the ventricular band and the subglottic space. Laminography is essential in the cases in which it is difficult or impossible to introduce an endoscope through the narrow glottis; otherwise subglottic involvement cannot be confirmed or

excluded. The use of a film in the esophagus has been suggested to outline in more detail possible subglottic tumors or extensions.

Laryngoscopy. Following the history and physical examination of the patient, mirror laryngoscopy is performed. This is a procedure which any general practitioner can learn.

In performing mirror laryngoscopy, it should be borne in mind that the anterior commissure is frequently not visualized, while the overhanging epiglottis may hide the particular area of the vocal cords in which early carcinoma is frequently found. If the pharynx is anesthetized locally with a spray of cocaine or pontocaine, it is possible to retract the epiglottis and carry out a more complete inspection.

Mirror laryngoscopy is a proper beginning of the investigation, but it is not enough. Direct examination is required to settle a number of points, such as whether, if carcinoma is present, it extends to the anterior commissure, whether it crosses the midline and involves the anterior extremity of the opposite cord, and whether a secondary perichondritis is concealing the true extent of the condition. If mirror laryngoscopy is negative, it is still a wise plan in any case of persistent hoarseness to resort to direct laryngoscopy if there is not prompt improvement within a period of observation which should not exceed two weeks.

The earlier the lesion in the larynx is examined, the more difficult, naturally, is the diagnosis. In later advanced stages the gross appearance is diagnostic. In the earlier, most curable stages it is not. It is also well to remember Clerf's⁵ shrewd observation that it is necessary to add a third to the extent of the lesion seen by mirror laryngoscopy in order to arrive at the true facts.

The experienced laryngoscopist, as Jackson¹¹ says, will realize, even before growths begin to ulcerate, that a malignant lesion gives the impression of having become an integral part of the local tissue while benign growths usually have a loose, superficial appearance and frequently move back and forth in the respiratory air current. The mobility of the cord is another impor-

tant consideration. If the growth is malignant, the cord may or may not be immobile. It is seldom fixed in the early stages but invariably fixed in the later stages. Mobility is best determined by an attempt to abduct the cord immediately after phonation. The location of the growth also determines whether or not the cord is fixed. In posterior growths fixation, it is early, in anterior growths it is late. A hypopharyngeal growth, which cannot be visualized by mirror laryngoscopy, may impair mobility by pressure on the recurrent laryngeal nerve, or by invasion of the cricoarytenoid joints, or for both reasons. Invasion of the motor musculature which produces impairment of mobility of the cord can usually be demonstrated by mirror laryngoscopy.

Biopsy. Symptoms cause suspicion of carcinoma of the larynx but they do not establish the diagnosis. Neither does the gross endoscopic appearance of the lesion, however conclusive it may seem. When carcinoma is confined to the vocal cord, the diagnosis is usually simple, but no surgeon has the moral right to undertake such mutilating surgery as laryngectomy, or even to perform laryngofissure, or to withhold either operation, on the ground that the gross appearance of the lesion suggests carcinoma or seems to exclude it. Even if the lesion has the appearance of tuberculosis and pulmonary tuberculosis is known to exist, that does not establish the diagnosis of tuberculosis laryngitis.

It is a sound plan to work on the principle that any abnormality of the larynx is likely to be carcinoma. Certainly carcinoma should be excluded before any other diagnosis is accepted. Chronic laryngitis is a justifiable diagnosis only after every other possibility has been exhausted. A therapeutic test is not permissible in either suspected tuberculosis or suspected syphilis if only because both diseases may co-exist with carcinoma.

In short, the diagnosis of carcinoma of the larynx must be made or excluded on biopsy and in no other way. Biopsy should be done without delay as soon as the suspicion of carcinoma arises. Watchful waiting is inexcusable. The specimen should be removed with care, to avoid unnecessary trauma, though this old fear of spreading

the neoplasm has practically disappeared with the newer anatomic knowledge of the region and its lymphatics. The risk of hemorrhage is minimal because the vessels of the larynx are so deeply placed laterally that they are not easy to reach. Since the excision is superficial, the risk of infection, particularly when one or another of the antibiotics is used, is remote, though oral sepsis should be eliminated before the specimen is secured. In spite of the difficulties and suspicions that were once attached to biopsy, there is now, as Jackson³ says, no such thing as an impossible biopsy. A specimen can be secured from any patient who can open his mouth.

Growths that are thought to be benign should be removed in toto, to determine that invasive tendencies are not present. All small malignant growths may also be removed in toto, biopsy being, in effect, intralaryngeal removal. At the same time, normal tissue should be spared. A notch may result in a cicatrix which will make proper approximation of the parts impossible, increase the difficulties of whatever future surgery may be necessary, and probably permanently impair the voice. The specimen must, however, be large enough for adequate examination. If the lesion is necrotic, the central area of ulceration should be avoided, for firm areas are likely to be more satisfactory for diagnosis.

It is essential that biopsy be done by the surgeon who is to perform the subsequent surgery, if only because, as just noted, in some cases the biopsy may become the eradication operation. Many surgeons prefer to remove the specimen during direct laryngoscopy and have it examined by frozen section. If the specimen is unsatisfactory, another can be secured at once. If the lesion is localized, immediate endolaryngeal removal may be done.

The histologic examination is the business of the pathologist, but it might be said that the differentiation between benign growths and malignant growths is based on the fundamental consideration that while proliferation may occur in both, in benign lesions there is exfoliation and the cells do not penetrate the basement membrane as they do in

malignant disease.

If the report of the original biopsy is negative but the suspicion of carcinoma is strong, a second biopsy is essential, and one is fully justified in removing tissue in the substance of the cord for examination, even at the risk of impairment of the voice. The patient on whom biopsies are repeatedly negative presents a major problem, as the following case history illustrates:

A 45-year-old white man was seen February of 1952. He had a history of hoarseness over a period of four months, but otherwise had been well all his life. He used alcohol in moderation and smoked from one to two packs of cigarettes daily. Physical examination was negative except for a small mass on the right vocal cord. The cord was freely movable. All laboratory examinations were within normal range.

Biopsy, carried out the day the patient was first seen, was reported as chronic ulcer, with no evidence of neoplasia. The ulcer bed was composed of chronically inflamed granulation and scar tissue.

Complete rest of the voice was advised. When the hoarseness did not improve within a month, a second biopsy was taken and was also reported negative. Two months later still another was taken. In spite of the negative biopsies, the suspicion of carcinoma continued strong. The patient was then given a total of 4,600 r by the Coutard technique.

A fourth biopsy, at the end of this period, was reported as showing anaplastic carcinoma; the neoplastic cells were scattered singly and in small groups of irregular, small strands among acute and chronically inflamed granulation tissue.

Shortly after this examination a mass appeared in the anterior chest wall. Thereafter the patient's course was rapidly downhill and he died February, 1953, one year after he was first seen.

Perhaps if thyrotomy had been performed when the first biopsy was reported as negative and the clinical suspicion persisted, the outcome might have been different.

Differential Diagnosis. The differential

diagnosis of carcinoma of the larynx includes a number of likely and unlikely conditions. Jackson¹¹ lists them as scleroma; eversion of the ventricle or prolapse of the sacculus; blastomycosis and other mycoses; keratosis; parchydermia; perichondritis; benign growths; hematoma; recurrent paral-

ysis; cricoarytenoid arthritis; other inflammatory conditions; tuberculosis; syphilis. While any of these may be present primarily or in association with carcinoma, the differential diagnosis includes chiefly the precancerous conditions already discussed, and tuberculosis and syphilis.

Third in a Series

STOP RHEUMATIC FEVER

THOMAS H. HAIGHT, M.D.

Medicine has undoubtedly existed as an art and as a science longer than recorded history indicates. Throughout the centuries the transition in the emphasis on the various practices of medicine has had a decisive influence on the prevention and control, or the lack thereof, of many serious afflictions of man. During the Victorian era of the late nineteenth century and the first part of this century, for example, many a case of syphilis went untreated because of the social mores and the almost expected reticence of individuals to seek medical assistance ever after Ehrlich's 606 was discovered. To call upon a physician with a venereal disease was considered to be too revealing to the doctor of the personal habits and life situations of the patient, and this conflicted seriously with the "accepted social standards" of that period. Yet it is now clear that this sociological and psychological approach to syphilis did far more harm than good. The intimate social habits of the inhabitants of this planet have probably not changed greatly since the days of Adam and Eve, and to attempt to repress the availability of treatment for a potentially curable disease by arbitrary and artificial Victorian standards would now generally be considered by enlightened individuals to be nearly akin to criminal negligence. In a subsequent article the importance factors affecting getting the patient to the physician will be discussed.

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While these introductory remarks point up the fact that human frailty as well as susceptibility to disease are omnipresent, they also are intended to help lead to a broader awareness on the part of the physician of the potential hazards of the streptococcal infections which all too often are undiagnosed and untreated when a sick individual seeks help. The moral of the story—and the subject of this communication—is that the practitioners of the art and science of modern medicine are morally obligated not to let *streptococcal infections* occur if possible. When they do occur, the doctor must be alert in making an early and accurate diagnosis in order that an effective antibiotic may be given promptly to prevent the serious sequelae of glomerulonephritis and to STOP RHEUMATIC FEVER. To achieve this important goal will require thorough knowledge on the part of the physician of all the symptoms, signs and laboratory clues that suggest an infection by a beta-hemolytic streptococcus. There is no doubt after the studies of Rammelkamp and associates at the Fort Warren Air Force

Base, and also other investigators, that the earlier adequate treatment for a streptococcal infection is instituted, the less the risk of developing rheumatic fever. It has furthermore been conclusively shown that even when the diagnosis is made somewhat later or if therapy is delayed as long as ten days from the onset of symptoms—or perhaps even longer—the incidence of rheumatic fever is still significantly reduced in antibiotic-treated patients as compared with untreated populations.

Hence, for the physician the problem really is concerned with the necessity of knowing the vagaries of streptococcal infections and the multitudinous forms in which they may present. This requires understanding the differences between clinical streptococcosis as seen in children and adults. Since it is the children, adolescents, and youths in the first two decades of life who are most apt to develop rheumatic fever following a streptococcal infection, knowledge of these clinical syndromes is exceedingly important. Although many well documented instances of primary attacks of rheumatic fever after the age of twenty are reported in the medical literature, the risk of either initial attacks or reactivation of previous rheumatic activity is greatest in the young population. And, of course, this is the group in which the diagnosis of the acute streptococcal infection may be the most difficult.

From numerous carefully controlled investigations, certain concepts have been evolved. Scarlet fever, for example, is but another form of streptococcosis and equally as great a risk, if untreated, in producing rheumatic fever. The pharyngeal symptoms and signs may be less evident than in other forms of streptococcal infections. This is not a reliable index and should in no way alter the therapy, which should be the same as for any other form of streptococcal infection. Scarlet fever may be diagnosed sooner than some other types since the rash calls attention to the patient's problem earlier. In passing, it might be noted that in recent years the major epidemics of scarlet fever have been considerably milder than those of former years, and in untreated patients the incidence of complications, morbidity, and mortality have been significant-

ly lower. The precise reasons for this attenuation of the disease have not been fully explained.

The younger patients are more apt to manifest streptococcal infections in two forms. First, these patients have a variable degree of fever; some children with virtually no *physical* findings in the nasopharynx, ears, or sinuses have infections accompanied by high fevers. In these the diagnosis can be proven conclusively only by culture. Since throat cultures are rarely taken routinely, the physician must remember that the beta-hemolytic streptococcus is a common cause of respiratory infections in children, is easily and rapidly transferred from one individual to another, and that this bacterium is probably more common as an etiologic agent of super respiratory infections in young people than either the pneumococcus or the staphylococcus. If it is possible to obtain a total leukocyte count in these febrile young children without local signs, the distinction between the normal or slightly low leukocyte count of a viral infection and the customary elevation of the count in a bacterial infection helps to determine whether antibiotic therapy should be given for a presumptive streptococcal infection to STOP RHEUMATIC FEVER. The lack of pharyngeal hyperemia, exudate, or cervical adenopathy does not necessarily rule out a streptococcal infection, particularly in this younger age group.

The second difference that may be seen in younger patients is the more common incidence of the suppurative complications. The incidence of otitis media, acute or chronic sinusitis, peritonsillar abscesses, and severe cervical lymphadenitis resembling phlegmon is considerably increased. Published data have failed to correlate these complications with malnutrition, gamma globulin levels, or the antibody response to the streptococcal antigen. The important point, then, is to be aware that streptococcal infection may present in any one of these forms with the initial respiratory illness having been so mild and perhaps afebrile as to be ignored. Yet the risk of developing rheumatic fever is equally as great following the suppurative infectious complications, and some investigators have even thought the risk to

be greater because of the less rapid eradication of the streptococcus from purulent sites during therapy.

Certain special groups must receive careful medical supervision to STOP RHEUMATIC FEVER. The highest incidence of endemic streptococcal infections, of epidemics, and of rheumatic fever has been in groups that were in regular, intimate, and frequent contact with each other. Thus, the major problem areas have been the military services where men sleep in dormitories with bunk beds that may be close together, in orphanages and children's homes where similar crowded conditions prevail, and occasionally in convalescent hospitals or on open hospital wards. Common to all such populations are factors such as the size of the group, the greater risk of host or carrier being exposed to a susceptible person, often less than adequate ventilation, and possibly poorer control of hygiene and personal care particularly during periods of respiratory illnesses.

So that the impression is not left that there isn't a "typical" streptococcal infection (apart from scarlet fever, as mentioned above), the clinical observations made at a large military base during a severe epidemic of streptococcosis will be mentioned. The study included obtaining throat cultures from all patients, with serologic grouping and typing of organisms isolated. Then a correlation could be made between the existence of a symptom or sign and the isolation of the particular type streptococcus causing the epidemic. While a positive culture could merely indicate that an individual was a carrier, and while one negative culture would not exclude an infection, the populations studied were so large that the data appear reliable. Several points are worthy of note. First, a sore and/or red throat in the absence of other findings was not a reliable criterion for the diagnosis of a streptococcal infection versus other bacterial or viral nasopharyngeal infections. Occasionally in scarlet fever and in a few other patients without skin rashes a marked hyperemia of the tongue, palate, and/or pharynx was a diagnostic aid.

Perhaps of the greatest help, however, was

the presence on the tonsils or posterior pharynx of a true exudate. Care must be taken to distinguish this from mucous secretions or inspissated "cheese-like material" also occasionally noted on the tonsils. The presence of true exudate was significantly lower in individuals who had had previous tonsillectomies and adenoidectomies. The finding of tender anterior cervical lymph nodes was also of great value, and the nodes were not always hypertrophied. When dysphagia was present in patients with tender cervical nodes, over 80 per cent of the throat cultures yielded streptococci. Few patients with temperatures less than 100° F. yielded the organism, although this did not exclude the diagnosis, especially if other symptoms or signs were present. An oral temperature above 102° F. was most frequently encountered in the streptococcal group. Similarly, only a few patients had leukocyte counts below 10,000 per cu. mm., many had counts between 10,000 and 16,000, and virtually all of the patients with counts above 16,000 per cu. mm. yielded streptococci on culture. The various potential combinations of these observations of these observations enhanced the likelihood of predicting the etiology of the infection. Other investigators working independently have used essentially similar criteria as these and have been able to predict streptococcal infections more than 75 per cent of the time, even in the younger age groups where the difficulties and variations mentioned above are so often encountered.

The *sine qua non* of rheumatic fever is the preceding streptococcal infection; hence the easiest and surest way to STOP RHEUMATIC FEVER is to make the diagnosis of such an infection early. To make an early, accurate diagnosis, the physician must be aware of the clinical syndromes that are seen in various age groups. A careful and thorough physical examination, when coupled with such simple office procedures as taking the temperature and doing a leukocyte count, are of infinite value. Once the diagnosis is made or reasonably suspected, it is clear that the administration of adequate antibiotic therapy will indeed achieve the all important goal to wipe out a crippler of hearts that leaves behind far

more damage each year than the virus of poliomyelitis ever did to skeletal muscle. Adherence to these diagnostic aids should

lead to early therapy and a substantial reduction in the incidence of this unnecessary affliction that still affects all too many.

An Objective Evaluation of Salicylates, Glucocorticoids and Salicylate-Glucocorticoid Combinations in the Treatment of Rheumatoid Arthritis

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The serum polysaccharide-protein ratio (PR) accurately serves as an expression of degree of inflammatory activity in patients with rheumatoid arthritis.¹ Comparison of the anti-inflammatory activity of cortisone, hydro-cortisone and phenylbutazone as measured by PR changes has been described in a previous study.² Evaluation of this anti-rheumatic property of newer gluco-corticoids, salicylates and the popular glucocorticoid-salicylate combinations is the subject of the present report.

Methods

Patients with active rheumatoid arthritis who had previously shown little tendency toward spontaneous remissions were studied at the Arthritis Clinic of University Hospital, the Arthritis Section of the Bone and Joint Hospital, and the Veterans Administration Hospital, all of Oklahoma City, Oklahoma. Blood was drawn for study at the beginning and at the end of each treatment period.

Serum protein-bound polysaccharide was measured by the method of Shetlar, et al.³ Serum protein was determined by the biuret method of Weichselbaum.⁴ The polysaccharide protein ratio (PR) was calculated by

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The following paper is from the Department of Pharmacology, Biochemistry and Medicine, University of Oklahoma School of Medicine, and Research Laboratory of Veterans' Administration Hospital, Oklahoma City, Oklahoma.

dividing the total serum protein by the total glycoprotein and multiplying by 100. Trial periods with each preparation varied from 14 days to 116 days, the average being approximately 28 days. Placebo medication consisted of one to eight lactose tablets of various types, or of one to ten mgs. of Terramycin^R daily. All medication was given orally in divided doses.

Changes in PR were grouped according to the percentage change from the value obtained at the beginning of the treatment period. Changes of less than five per cent, which are within the chemical error of the method, were described as unchanged. While PR changes of less than 10 per cent were

considered of interest, confidence was placed only in changes greater than 10 per cent.

Results

Prednisone exhibited slightly less anti-inflammatory activity than prednisolone when compared at the same dosage levels. At daily doses of five to 10 mg., prednisolone was comparable to doses of 15 to 20 mgs. of prednisone. This greater potency of prednisolone was further manifested with larger doses of two compounds (Table I).

The salicylates (Neocylate^R*, Pabalate^R*, and aspirin) exerted comparatively weak but significant anti-inflammatory activity insofar as inducing major decreases in PR (Table II). The daily doses of these preparations approached the maximal amounts that the patients could comfortably tolerate for prolonged periods of time. In addition to the salicylates of small amounts of Prednisolone (Cordex^R*) and cortisone (Neocylate with Cortisone^R*) produced no reinforcement of anti-inflammatory effect. The salicylate-pantothenate combination (Panate^R*) appeared to be slightly more effective than the other salicylate combinations, though the number of treatment trials with this preparation was small. It is of interest that the salicylates appeared more effective in the production of minor changes in PR or in maintaining the status quo. The greater decreases (10 per cent) of PR produced by salicylates usually occurred in patients with

lesser degree of rheumatoid activity. The patients expressed no preference for the glucocorticoid-salicylate combinations over the glucocorticoids alone. Major objective responses to placebo medication were comparatively low (six per cent) (Tables I and II) and were considered to indicate the frequency of short term spontaneous remission in the patients studied.

Discussion

A clear objective evaluation of therapeutic agents in the treatment of rheumatoid arthritis is difficult. The unpredictable changes in the natural course of disease, and enthusiasm of both physician and patient for a "cure all," particularly in early and mild rheumatoid arthritis, has testified to the temporary credit of a plethora of nostrums, devices, rituals and fetishes, as well as more considered medications.

A systemic and reasonably rapid approach to objective evaluation of the many promising agents that are available and which will become available is of obvious importance. Our confidence in the PR ratio as a rational means to this end has been gained through considered evaluation of the method and comparison with other techniques for assaying systemic inflammatory activity.^{1, 5, 6}

The natural vagaries of rheumatoid arthritis are considered to be minimized in those patients who have had their disease for sev-

TABLE I
COMPARISON OF PREDNISONE AND PREDNISOLONE BY PR CHANGE
IN PATIENTS WITH RHEUMATOID ARTHRITIS

Drug	Daily Dose Mg.	Increased PR		Decreased PR			Unchanged (<5%)	No. of Pt. Trials
		5-10%	> 10%	5-10%	> 10%	**		
Placebo*	—	15	9	5	4	(6%)**	30	63
Prednisone	5-10	3	4	2	3	(19%)**	3	15
"	15-20	2	3	3	3	(27%)**	3	14
"	25-30***		1	2	6	(46%)**	5	14
"	40				1			1
Prednisolone	5-10	1	2	1	3	(27%)**	4	11
"	15-20***	3	3	1	12	(46%)**	7	26
"	25-30***			1	8	(67%)**	2	11
"	40				1			1

*See footnote for composition.

**Percent of patient trials.

***Significantly different from placebo group at the 0.1% level using the X² method of statistical treatment.

eral years during which time little tendency to wide swings in inflammatory activity has been observed. The present study has been largely concerned with this type of patient, usually referred because of the severity of the disease or a discouraging response to treatment.

The significant value of relatively large doses of salicylates in controlling the acute inflammatory aspects of rheumatoid arthritis is borne out by the data presented (Table II). No particular advantage, insofar as anti-inflammatory effect, was gained upon addition of small amounts of glucocorticoids to the salicylates. This might indicate a different mode of anti-inflammatory action of these agents and would perhaps attest to the pharmacologic irrationality of such combinations for the treatment of rheumatoid arthritis. However, the patients described a slight preference for the combinations over salicylates alone.

The delta-1 glucocorticoids in suitable doses, as has been reported^{7, 8, 9} exert dramatic anti-inflammatory activity, at least in the short term treatment of rheumatoid arthritis. However, the doses necessary to produce a substantial effect in this regard are not to be recommended for prolonged therapy, nor for any patient who can be controlled with reasonable doses of salicylates alone.

On comparison of the present data with a previously reported study of cortisone done by the same technique,² prednisolone on a

weight basis, exhibits approximately five times the anti-inflammatory potency of cortisone. This ratio of activity has been generally reported.^{8, 10} However, on the basis of the present data, prednisolone proved somewhat more effective than prednisone in equal doses. This finding is of interest in view of the enhanced potency of the parent compound (hydrocortisone) over cortisone by a similar ratio.

No clear inference can be drawn from the data presented as to the relative value of the preparations studied in the long-term management of rheumatoid arthritis.

Summary

The immediate anti-inflammatory activity, as manifested by the serum protein-bound polysaccharide-protein ratio (PR), of various glucocorticoids, glucocorticoid-salicylate combinations and salicylates has been compared in patients with rheumatoid arthritis.

Salicylates in tolerable doses were found to exert a significant though modest anti-rheumatic effect. The addition of small amounts of glucocorticoids to the salicylates produced no objective evidence of drug reinforcement.

Prednisolone exhibited approximately five times the anti-inflammatory potency of cortisone insofar as the production of changes in PR and prednisone proved slightly less effective than prednisolone in this regard.

(Continued on Page 528)

TABLE II
COMPARISON OF SALICYLATES AND SALICYLATE-GLUCOCORTICOID COMBINATIONS
BY PR CHANGE IN PATIENTS WITH RHEUMATOID ARTHRITIS

Drug	Daily Dose (tabs)	Increased PR		Decreased PR		Unchanged (<5%)	No. of Pt. Trials
		5-10%	> 10%	5-10%	> 10%		
Placebo*	1-8	15	9	5	4 (6%)**	30	63
Salicylate*	8	7	6	7	8 (16%)**	20	48
Salicylate* Plus Cortisone	8	2	5	9	3 (12%)**	6	25
Salicylate plus Prednisolone	8-10	4	5	3	5 (16%)**	14	31

*See footnote for composition.

**Percent of patient trials.

Case Report*

ESSENTIAL HYPERTENSION in CHILDHOOD

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Hypertension without apparent cause is uncommon in childhood. The search for that cause which may never be found is tedious for the physician and trying for the child but necessary. The final procedure, exploration of the kidneys, may disclose one which is inadequately supplied with blood (Goldblatt kidney).¹ This finding not only removes the hypertension from the category of essential but may be remediable.

(1)

(2)

(3)

Case Report

R. S., a white girl of ~~eighteen~~¹⁸ (18) months, was first admitted to Wesley Hospital July 1, 1955, in obvious heart failure, ~~with a story of having~~^{she had} been well until she was a year old; ~~when~~^{then} her appetite began to fail, and she became cross, irritable and hard to live with. Her father performed in rodeos, and she and her mother traveled with him. She had ~~gotten to~~^{reached} the point of refusing most foods except ~~hamburger and French fried potatoes~~^{before admission}. During the previous month, she had had several blue spells, ~~and upon discovering~~^{when the family physician discovered} an enlarged cardiac shadow on an X-ray film, ~~the family doctor~~^{he} had referred her for further study and treatment.

(EE)

She was born weighing 6 $\frac{3}{4}$ pounds after an uncomplicated pregnancy and labor. Her mother nursed her for four ~~(4)~~⁴ months, and she had progressed normally until she was a year old, ~~weighing~~^{when she was} 21 pounds, ~~at that time~~. There was no history of hypertension in other members of the family.

NOTE: This is the fourth and final draft as corrected by the editing service of the American Medical Writer's Association. The availability of such a service to the JOURNAL should make the members of the Association less afraid to submit case reports and other material to the JOURNAL for publication. The decision to submit a paper for editing is the editor's.

On admission her weight was 19¼ pounds; temperature 99.6-R; pulse 160. The respiratory rate was too rapid and the liver was palpated three (2) (FB) below the right costal margin. The heart was large to percussion, but there were no murmurs.

Roentgenograms and fluoroscopy confirmed the impression of cardiac enlargement. The enlargement appeared to be general. At the rate of 170 the PR interval was .12 seconds. The mean ventricular axis was minus 20 degrees. There were large P waves in the limb leads.

The patient was digitalized and responded well. By exclusion a diagnosis of endocardial sclerosis was made, and she was sent home on digitoxin and, for what it might offer, 10 mg. of Hydrocortisone every six hours for three days out of each week in the same manner that (nephrotics) were being treated.

Two weeks later she weighed 21 pounds. Her pulse was 160. Her systolic blood pressure was 190 but her resistance to the procedure was so great that no significance was attached to it. She had done fairly well, although there was no appreciable change in either the ECG or roentgenograms. She was continued on digitoxin and the steroid was changed to 2½ mg of Meticortin every 8 hours for three days out of each week.

When she was examined two months later, she was much more cooperative. The blood pressure in the right arm was 210/160, in the left 190/130, and in the right leg 230/?. In November, 1955, she was admitted to the hospital for further study. The fundi were normal. The urine showed Sp. Gr. of 1.016, albumin 1 plus, and 4-6 WBC/HPF. The NPN was 32.8 mgm per 100 cc; total serum protein was 7.8 grams per 100 cc with A.G. ratio of 5.9/1.9; serum calcium was 10.9 mg per 100 cc and sodium 153.6 mEq/L. An excretory urogram showed a normal appearing and functioning urinary tract. In considering the possibility of a pheochromocytoma, a regitine test was negative as was a test to find pressor substances in her urine by injecting it into a dog.** Since no explanation for

	<u>WBC</u>	<u>RBC</u>	<u>Hb</u>	<u>ESR</u>	<u>ASO</u>	<u>CRP</u>	<u>Blood Culture</u>
	7,950	4.4	13 grams	1 mm 1 hr	166	Neg.	No growth
<u>NF</u>	3						
<u>F</u>	39		Urine-Sp. Gr. 1.007				
<u>L</u>	57						
<u>M</u>	1		Alb. 1 plus 6-8 RBC/NF 1-2WBC				

her hypertension had been found, an arteriogram was done to see if there was any evidence of a vascular anomaly or of an inadequate blood supply to either kidney. The nephrogram showed changes on the right that could be due to an aneurysm of the right renal artery. While her situation was being considered, she was kept on digitoxin and put on Reserpine 0.125 mg every six hours. (12)-(13)

On December 8, 1955, five months after she was first seen, an operation was performed*** to explore the right kidney first and if necessary, the left. The description of the procedure follows:

"The peritoneum overlying the right kidney was opened and the kidney was thoroughly explored and seemed to be normal. Each vein and artery from the right kidney was explored, all the way from the hilus to the aorta and each appeared to be normal. The right adrenal gland was then explored and it appeared to be normal. We then moved to the left side and kidney and vessels were explored and each appeared to be normal. The adrenal gland on the left was quite normal."

After ~~recovery~~ ^{she recovered} from the operation, the patient was sent home on digitalis, and Reserpine with a diagnosis of hypertension without a discoverable cause. She has done well. Her heart is much smaller; and on her last visit in November, 1956, the blood pressure in the right arm was 138/80, left arm 120/80, and she weighed 33 pounds. The digitalis was no longer considered necessary but the Reserpine was continued. (8)-(14) (15)

Discussion

The subject of essential hypertension in infancy and childhood has been thoroughly discussed by Haggerty et al² The basis for their report was nine patients studied at the Children's Medical Center in Boston. While some of these patients had evidence of hypertensive encephalopathy none had heart failure as did the patient reported here. A study of the blood pressure in infants and children with a diagnosis of endocardial sclerosis has not been consistent although Kelly and Anderson³ found it normal or low in six patients in which it was measured of the seventeen that they reported. The diagnosis of essential hypertension can only be made by exclusion. This is also true of endocardial sclerosis. (16) (17) (C) (G-1) (C)-(18)

REFERENCES

- *From the Pediatric Department, Wesley Hospital, Oklahoma City, Oklahoma.
 **The dog studies were done by Kenneth Back, Department of Physiology, University of Oklahoma School of Medicine.
 ***A. H. Bell, M.D., and Donald D. Albers, M.D.

(F) -19

- (1) Snyder, C. H.; Bost, R. B., and Platou, R. V.: Hypertension in Infancy, with an Anomalous Renal Artery. *Pediatrics*, 15:88 (Jan.) 1955.
- (2) Haggerty, R. J.; Maroney, M. W., and Nados, A. S.: Essential Hypertension in Infancy and Childhood. *Am. J. Dis. Child.* 92:535 (Dec.) 1956.
- (3) Kelly, Janice and Anderson, Dorothy H.: Congenital Endocardial Sclerosis. *Pediatrics* 18:539 (Oct.) 1956.

Note: The patient was seen again in April 1957. Her blood pressure in the right arm was 130/80, in the left 120/80. The Reserpine was discontinued by gradually reducing the dose, and her blood pressure has remained only slightly elevated. One wonders if the exploration of the kidneys had some remedial effect.

Dr. Ben Nicholson, ESSENTIAL HYPERTENSION IN CHILDHOOD

COMMENTS: The NUMERALS pencilled in the righthand margins of your paper refer to the numbers alongside of the comments below. The LETTERS in the righthand margins of your paper refer to the letters alongside of the comments on the two attached duplicated sheets. Please note also the changes made directly on your manuscripts to make sure that none alters your meaning. All in all, I think that your paper is both well written and well organized.

- 1 "one" is ambiguous. Better: "Disclose a kidney which . . . "??
- 2 Dorland lists "Goldblatt hypertension" but I can't find this term.
- 3 The "finding" is not remedial; the condition is. Maybe: "but indicates that it may be remedial . . . "??
- 4 I prefer: "When she was admitted, her weight . . . "
- 5 "99.6 (rectal); pulse . . . "?
- 6 The abbreviation is not in Dorland. Why not spell it out?
- 7 Not a proper verb. "The patient responded well to digitalization . . . " or, less desirable: "The patient was given digitoxin and . . . "?
- 8 Sounds colloquial. Maybe: ". . . was made. She was sent home, there to be treated with digitoxin and . . . "?
- 9 Jargon. "the patients with nephrosis were . . . "

- 10 "later" than what? Than the 2 weeks—or than the initial release?
- 11 Dangling participle. Perhaps: "a regitine test, to rule out pheochromocytoma, was negative, as was . . . "
- 12 Can't find this word in Dorland.
- 13 Maybe: "Nephrography showed . . . "
- 14 Perhaps your wording is acceptable. Surely it's less stilted, more natural than (especially here, though not so much as at #8) any alteration I would suggest.
- 15 "digitoxin"??? See p. 8.
- 16 "et al." is ok in the bibliography, but in the text, doesn't "and colleagues" sound better?
- 17 Ambiguous. What do you mean that the "study" has not "been consistent"? And what does the "it" refer back to? This is a bit too confusing for me to try a rewrite. I understand the "it" but not the part about the something (undefined) not being consistent.
- 18 "The same holds true for endocardial sclerosis." or "This point applies as well to endocardial . . . "
- 19 "The studies on dogs were . . . "

The letters written in the margin of your paper refer to the letters alongside of the comments below:

- A. Avoid weak, passive verbs. Whenever you can, use active verbs. They are stronger, more economical, often more precise than passive verbs. Compare, for instance, the passive "Hay is eaten by the horse" with the active "The horse eats hay."
- B. Avoid incomplete comparisons. ("more" than, "better" than what?)
- C. Faulty reference. "This," "it," and "which," when used to refer to whole ideas rather than to

specific nouns, are responsible for much ambiguity. Wrong: "John was ill today. This caused him to miss class." ("This" has no clear antecedent; it refers to the whole idea expressed in the first sentence. Better: "John was ill today. This illness caused him to miss class." Better still: "John was ill today. His illness caused him to miss class." Pronouns without antecedents—"They," for example—also cause ambiguity.

D. Agreement.

1. A subject and verb should agree in number. Wrong: "None of the five books were for sale." ("None" is a singular and takes a singular verb.) Better: "None of the five books was for sale."

2. A pronoun should agree in number with its antecedent. Wrong: "The Jones Company invites you to visit them during their bargain sale." ("The Jones Company" is singular; it takes a singular pronoun.) Better: "The Jones Company invites you to visit its store during its bargain sale."

E. Use the gerund rather than the noun construction for economy. (For example, say "in treating cancer" instead of "in the treatment of cancer.")

F. Avoid nouns as adjectives when they sound jargonish or when their use results in ambiguity. Wrong: "The Committee for Constitutional Revision meeting opened with the national anthem." Better: "The meeting of the Committee for Constitutional Revision opened . . ." etc. Nouns used as adjectives can make possible ludicrous interpretations. Wrong: "Cleft-palate children should be treated by a cleft-palate expert." Better: "Children with cleft palates should be treated by an expert in cleft palates."

G. Faulty modifiers. All modifying words, phrases and clauses should be so placed that they clearly modify the right word or words.

1. Such modifiers as "only," "just," "even" and "hardly" should be so placed that they do not modify the wrong words. Wrong: "He only wanted bread." Better: "He wanted only bread."

2. A participle should accurately modify either a noun or a pronoun. Wrong: "Motoring down the highway, a sign said that it was five miles to Tolono." Better: "Motoring down the highway, we saw a sign which said that it was five miles to Tolono."

3. A clause should join the noun it modifies. Wrong: "The man was there who sold me my automobile." Better: "The man who sold me my automobile was there."

The letters written in the margins of your paper refer to the letters alongside the comments below:

AA Avoid the ambiguous "we." You should always clearly state the antecedent of "we" so there is no doubt whether you mean "we physicians," "we obstetricians," "we Americans" or "my associates and I." If you are reporting work done in conjunction with others, you may properly use

"we," provided you make clear just who is represented by "we." But don't say "we" when you mean "I" or "our" when you mean "my."

BB "Biopsy" is an examination of tissue. Therefore one cannot properly speak of "taking a biopsy"; one "takes a specimen for biopsy."

CC Do not say "case" when you mean "patient." A case is an instance of disease, the totality of the symptoms and of the pathologic and other conditions. A patient is the human being who is sick.

DD A.M.A. editors prefer "ic" to "ical" endings on practically all medical and scientific adjectives, according to Fishbein, *Medical Writing*, Phila., Blakiston Co., 1950, pp. 86-89. Hence it is "biologic," not "biological"; "physiologic," not "physiological"; "serologic," not "serological"; "anatomic," not "anatomical"; etc.

EE The term "roentgen ray" is preferable to "x-ray," the word "roentgenogram" to "x-ray" or "x-ray picture," according to Fishbein, p. 59. Except in references to the apparatus itself, it seems better to use variations of "roentgen" than those of "x-ray."

FF Do not say "surgery" if you mean "surgical operation" or "surgical intervention." It's not good usage to say, "Surgery should be advised for this disease." Better: "Surgical operation should be advised for this disease." Dorland and other medical dictionaries define **surgery** as (a) that branch of medicine concerned with diseases requiring operative treatment; (b) a physician's or surgeon's consulting room.

GG Don't say "pathology" if you mean "pathologic change" or "pathologic condition." Dorland defines **pathology** as that "branch of medicine which treats the essential nature of disease, especially of the structural and functional changes which cause or are caused by disease."

HH "Dose" and "dosage" aren't synonyms. **Dosage** is the administration of medicine in regular doses or the regulation and determination of the proper doses. The **dose** is the amount of a medicament to be administered at one time.

II Be consistent in tense throughout your paper, especially in case reports and reviews of the literature. Don't skip from past to present tense without good cause. One can justify either past or present tense in case reports; whichever you use, use consistently.

JJ A summary should not merely DESCRIBE the paper. It should, as the term suggests, really SUMMARIZE—recapitulate the major points.

KK The title should not be so general that it fails to give the reader a clear idea of what the paper is about. It should be specific enough that a reader encountering it in a medical index will have some idea of the major theme of the paper.

LL Long direct quotes—usually those of five or more typewritten lines—are typed single-space, indented, without quote marks. The printer usually sets them, indented, in a face smaller than regular body type.

PRESIDENT'S LETTER



Someone has said "with statistics you can prove anything." Another often heard statement is "one's view point determines his opinion."

Recently in a national poll by columnist Roper it was reported that the public felt they were over charged for services most by the plumbers and secondly by the Medical Profession. One can immediately respond to one of the above premises, but I feel that the constant repetition of complaints of the cost of medical services is not without cause. In an analysis of the problem many factors pro and con can be assembled, such as the fact that the incidence of medical services are greater, they may effect the bread winner of the house or they may vary as to localities of the country. I have felt for sometime that a certain amount of criticism has arisen from the lack of understanding on the part of the patient or the patient's family, not only as to what the charges would be, but also in understanding the amount of services that were rendered.

I am therefore making an especial appeal that all of us in the Oklahoma Medical Association make a positive approach to this problem. Let us make it a rule that we do discuss our fees with our patients. Let us be informative in telling them of the extent and the magnitude of our services and thereby letting them realize the time, energy and mental application that good medical services entail, and lastly with a few moments of conversation, well spent create a spirit of mutual understanding and goodwill.

John Flack Burton, M.D.
P r e s i d e n t

NO KNOWN CONTRAINDICATIONS

ROLICTON[®]

permits high dosage,
more effective diuresis in more patients

The low incidence of side action with Rolicton (brand of amisometradine) permits high dosage, extending the range of effective diuresis to a greater number of patients than was previously possible.

Laboratory studies demonstrate that Searle's new oral diuretic, Rolicton, causes positive diuresis with an essentially balanced excretion of water, sodium and chlorides.

Settel¹ studied the effect of Rolicton in forty-seven patients and found no serious side effects. Assali, who observed the action of Rolicton in five patients with severe toxemia of pregnancy, states² that side actions are essentially non-existent. Side actions of such low incidence, together with its diuretic efficacy, suggest a high order of usefulness for Rolicton.

One tablet of Rolicton, b.i.d., is usually adequate to maintain patients free of edema after the first day's dosage of four tablets. Some patients respond well to one tablet daily. G. D. Searle & Co., Chicago 80, Illinois. Research in the Service of Medicine.

1. Settel, E.: Rolicton[®] (Aminoisometradine), a New, Nonmercurial Diuretic, *Postgrad. Med.* 27:186 (Feb.) 1957.

2. Assali, N. S.: Personal communication, May 28, 1956.

SEARLE



Normal glomerulus, showing arteriole musculature, glomerular epithelial podocytes, and "epitheloid" muscle cells of vas efferens.

Health Department Offers Asian Flu Diagnosis

F. R. Hassler, M.D., Director of Laboratories of the State Department of Health, announced recently that diagnostic laboratory services are available to members of the medical profession for both ordinary and Asian influenza specimens. Serological and culture techniques are used in the State laboratory, which Doctor Hassler believes is the only one in the State that has the virus diagnostic procedure available.

Specimens should be sent in care of Doctor Hassler to Division of Laboratories, Oklahoma State Department of Health, 3400 North Eastern, Oklahoma City 5, Oklahoma.

Collecting and Handling of Specimens

For Serology: The quantity of blood desired is 7 to 10ml per specimen. This may be collected and shipped to the Laboratory in an ordinary Wasserman tube. The first serum sample (acute) should be taken not later than the fifth day of the disease and the second specimen (convalescent) at least seven days after onset, or about one week after the first specimen.

For virus examinations, two specimens are required. For diagnosis it is necessary that the second specimen show an increase in titer (fourfold). A single specimen is of little diagnostic value. In the usual procedures, both the acute and the convalescent specimen will be run together, at the same time, and reported together.

For Virus Isolation: Pharyngeal washings are used. Optimally, the washings should be obtained while the patient is still febrile, during the first three days of illness. The patient should gargle two times with 10 to 15ml of diluent. The diluent may be sterile broth, skimmed milk or distilled water.

The diluent is placed in a small wide mouth sterile bottle for delivery to the Lab-

oratory. It should be delivered to the Laboratory within two hours or, if this is not possible, the specimen should be frozen and it is necessary that the specimen reach the Laboratory in a frozen state. If the specimen cannot be delivered to the Laboratory within two or three hours, it should be frozen in dry ice. Specimens coming from a distance should be packed in an insulated container, frozen in dry ice, and sent by prepaid Mistletoe Express. Avoid sending specimens so they will reach the Laboratory on Sunday or Holidays.

Results of Tests: Interpretation of serologic tests depends on an increase in titer as determined by the second specimen. Blood specimens will be run as soon as possible but both the acute and convalescent specimen should be run at the same time. In most instances, the acute specimen will be held until the convalescent specimen is received.

Pharyngeal washings are cultured on chick embryo and these are available once a week. Reports will be made just as soon as possible but this will depend somewhat on the day of the week the specimen is received since the chick embryos are only available on certain days.

Speaker for A.O.A. Fall Lectureship Announced

Helen B. Taussig, M.D., assistant professor of Pediatrics at Johns Hopkins University, will deliver the Alpha Omega Alpha Fall Lectureship to be held at 8:30 p.m., Thursday, October 17, 1957, at the University of Oklahoma School of Medicine Auditorium.

Doctor Taussig's topic will be "Selection of Patients with Congenital Heart Disease for Surgery."

International Society of Internal Medicine To Hold Fifth International Congress in Philadelphia

Over 1,600 American physicians have joined the International Society of Internal Medicine during the past two months. This equals the number from all the other countries of the world. Thus, with continuing accessions, more than 3,000 will be eligible to attend the Fifth Congress at Philadelphia, April 23-26, 1958. It is anticipated that at least 1,000 American and 400 overseas physicians will be present. Many of the foreign visitors will also attend the Annual Session of the American College of Physicians at Atlantic City and the subsequent meetings of the Society of Clinical Investigation and the Association of American Physicians also at Atlantic City. Some will stay over for the World Gastroenterological Congress and the annual meeting of the American Gastroenterological Association in Washington, D. C., May 24-31. Tours of the medical and scientific centers in the Far West, Mid-West, and along the Eastern seacoast will also be available.

Among the participants on the scientific program from other countries will be Professor Nanna Svartz of the Karolinska Hospital, Stockholm, Sweden, who was one of the founders of the International Society; Sir Russel Brain, President of the Society and of the Royal College of Physicians of London; Dr. C. deLangen, Holland; Professor C. Jimenez-Diaz, Spain; Professor A. L. Miasnikov, Russia; Professor R. M. Castex, Argentina; Dr. Otto Wegelius, Finland; Professor A. Floros, Greece; and many other distinguished physicians. Among the outstanding North American contributors to the program will be Dr. Charles H. Best, Professor of Physiology at the University of Toronto, co-discoverer of insulin; Dr. Philip S. Hench of the Mayo Clinic, Rochester, Minnesota, Nobel Prize winner and past president of the Arthritis and Rheumatism Foundation; Dr. Howard A. Rusk, Professor of Physical Medicine and Rehabilitation, New York University Bellevue Medical Center; Dr. Shields Warren, Professor of Pathology, Harvard Medical School, Boston,

Member of the Medical Advisory Committee and formerly Director of Biology and Medicine of the Atomic Energy Commission; and Dr. Irving S. Wright, Clinical Professor of Medicine, Cornell University School of Medicine, New York, past president of the American Heart Association.

Entertainment features will include a reception at the Sheraton Hotel, a concert by the Philadelphia Orchestra, a banquet, and a luncheon at the University of Pennsylvania Museum. For the ladies there will be, in addition, a luncheon at the Philadelphia Museum of Art and a tour of the du Pont Gardens. Also for the foreigners, dinners in private homes will be arranged for one evening.

The Executive Committee of the International Society of Internal Medicine includes as President Sir Russell Brain, London, England; as Secretary, Professor H. Ludwig, Basel, Switzerland; as Treasurer, Dr. E. Jacottet, Basel, Switzerland; also Sir Harold Boldero, London, England; Professor A. Gigon, Basel Switzerland; Professor C. Jimenez-Diaz, Madrid, Spain; Professor L. Justin-Besancon, Paris, France; Dr. T. Grier Miller, Philadelphia, Pennsylvania; and Professor N. Svartz of Stockholm, Sweden.

Dr. T. Grier Miller, President of the Fifth International Congress, has recently named the following as chairman and chairwoman of the local arrangements committee: Symphony Concert Committee, Dr. Alexander Rush; Special Entertainment Committee, Dr. Harrison F. Flippin; Banquet Committee, Dr. David A. Cooper; Registration Committee, Dr. Leandro M. Tocantins; Women's Entertainment Committee, Dr. Elizabeth K. Rose; Transportation Committee, Dr. Truman G. Schnabel, Sr.

Dr. Edward L. Bortz, former President of the American Medical Association will serve as official representative of the Fifth International meeting of the College of Physicians and Surgeons of South Africa, Sep-

tember 16-21, 1957. Dr. Bortz will also be the official Delegate of the American College of Physicians to the South African Congress. He, together with Sir Russell Brain, will seek to promote among those attending the meeting at Durban, an interest in participation in the Fifth International Congress.

Dr. Leandro M. Tocantins, Chairman of the Registration Committee of the Congress, will serve in a similar capacity when he visits Brazil and Argentina from August 23-September 7, 1957. He will meet with Pan-American representatives on the occasion of the celebration of the Tenth Anniversary of the Founding of the Hospital Dos Servidores Do Estado, Rio de Janeiro, Brazil.

Although additional funds are needed to cover administration costs, transportation services, publications and other general expenses, many generous contributions have already been received. The present sponsors include the American College of Physicians, the National Institutes of Health, the National Foundation of Infantile Paralysis and the Albert and Mary Lasker Foundation. Also, donations have been received from Burroughs Wellcome & Co., Inc., Hoffman-LaRoche, Inc., Johnson & Johnson, Eli Lilly & Co., the Merrell National Overseas Laboratories, Prize Laboratories, G. D. Searle & Co., Smith, Kline & French Foundation, The Upjohn Co., and the A. H. Robins Co.

Those physicians in North and South America who wish to become members of the International Society of Internal Medicine and to attend the Fifth International Congress of Internal Medicine, should request application forms from Mr. E. R. Loveland, Secretary-General of the Fifth Congress, 4200 Pine St., Philadelphia 4, Pa. Dues are \$5.00 for a two-year period. Physicians in other countries should write to Professor H. Ludwig, 2, Med. Aberlung Burguspital, Basel, Switzerland.

Anyone who wishes to participate in the program should send the title of his paper and a 200 word abstract, in triplicate, to Dr. Frank N. Allan, 605 Commonwealth Ave., Boston 15, Mass.

'Investment' and 'Charter' Insurance Exposed

The El Paso Better Business Bureau in a recent bulletin ran the following article, heading it "A Few Life Insurance Companies 'Gimmick' the Buyers."

"We are going to give you the world with a fence around it" might be just as believable today as some of the sales pitches being used by some of the new Texas Insurance companies in the sale of "charter" and "investment" type life insurance contracts. One agent recently represented that at the end of the fifth year the policy he was selling would return a dividend equal to the annual premium paid on a \$25,500 policy and the agent went on to show that at the end of 25 years, the policyholder would draw about \$18,000 in dividends. If he let it ride, it might even go on to \$70,000.

Another agent is selling a combination insurance policy and a mutual fund comprised of insurance company stocks. The premiums on his policy are about \$500 a year for 18 years on a \$10,000 policy. According to the agent this policy would be paid up in 18 years and the fund part would be worth \$63,000 . . . 'Guaranteed'? Of course not, but by this time the buyer is so excited over how rich he is going to get he doesn't even ask.

These "charter life" and "investment" policies are offered by some of the newer Texas life insurance companies in order that they might compete with the bigger and better known companies.

Agents for these companies carry fancy charts to depict the performance record of some of the outstanding life insurance companies over past years. We recently sent photo copies of two charts used here to the companies whose records these charts were supposed to show.

One chart showed that on a \$5,000 face value "charter" contract with Kansas City Life Insurance Company costing the policyholder \$200 a year, Kansas City Life paid a dividend of \$200 at the end of the seventh year of a 20-year contract.

According to the chart, the dividend in-

NATIONAL HEALTH LEGISLATION

A Summary of First Session Action Taken by 85th Congress

Prior to adjournment on August 30, the 85th Congress had received 441 bills concerning health and related legislation; a record number for a first session. Congress deferred action on most of them until the second session convenes on January 7, 1958. This was done for a variety of reasons such as a desire for more extensive hearings, economy, and, possibly an inclination to save some popular-appeal bills for next year. Ordinarily, the second session is a more crucial one in that controversial issues important during election time are then considered.

No action was taken during the first session on such important measures as U.S. aid to medical schools, health insurance for federal civilian employees, nor on a growing list of ideas for government paid hospitalization of O.A.S.I. beneficiaries. Authorities believe these subjects will receive considerable attention in the forthcoming session.

The interim report below summarizes all action taken on health measures up to adjournment and lists significant bills that will be awaiting decisions in the second session.

Health Legislation Enacted

Doctor Draft Extension (P.L. 85-62)—Because the doctor draft was set to expire July 1, this was one of the first health measures passed by the 85th Congress. It gives Selective Service authority until July 1, 1959 (when both this amendment and the regular draft expire) to call certain physicians up to age 35 for military service. Only

increased each year and at the end of the 19th year, the premium was still \$200 but the dividend was \$560. No one could fail to be impressed by such a record. When contacted, the president of Kansas City Life stated they had never offered a "charter" policy like the chart indicated. The company did issue a "board" contract in 1905 and 1906 and such a policy would be illegal in Texas today.

A similar denial was made by the Boston Mutual.

those under age 35 with obligations under the regular draft and who have been deferred for any reason may be called. Defense Department, meanwhile, says it is getting enough medical school graduates as reservists to preclude use of the new law at this time.

Medical Research (P.L. 85-67)—Another early enactment was the fiscal 1958 budget for the Department of Health, Education, and Welfare. Congress voted \$2,503,130,381 for all HEW programs, including record high totals for medical research through the National Institutes of Health. Congress can—and in all likelihood will—receive requests from the administration for additional money during the current fiscal year through a deficiency appropriation.

Vendor Medical Payments (P.L. 85-110)—This law is intended to resolve some problems arising out of the social security amendments of 1956 with particular reference to vendor medical payments for public assistance recipients. Under P.L. 110, states are given the choice of either (a) using federal funds for vendor medical payments within the \$60 a month per recipient maximum or (b) establishing a single medical vendor payment financed by federal funds which were set by a 1956 law at one-half of \$6 a month per adult and one-half of \$3 per child, to be matched by states. States also can continue to make direct payments to recipients for medical and subsistence expenses.

Disability Freeze Extension (P.L. 85-109)—Under this law, a new deadline of July 1, 1958, is established for disabled persons covered under social security to apply for full retroactivity under the disability freeze passed in 1954. Applications filed by next July will allow workers to count the full period of disability provided they were eligible for disability benefits at the time the disability was incurred. After next July 1, any period of disability established for a worker cannot begin earlier than one year before the application is filed.

Indian and Non-Indian Hospitals (P.L. 85-

151)—At the urging of some Western members of Congress, P.L. 151 was enacted to authorize federal funds to help build non-profit or public hospitals and diagnostic or treatment centers on or near Indian reservations; the extent of federal contribution will be determined by the percentage of care given eligible Indians. The facilities have to agree to care for both Indians and non-Indians.

Vocational Rehabilitation Traineeships (P.L. 85-198)—This measure extends from two to three years the maximum period of time over which the federal government can pay for partial financing of traineeships in physical medicine and rehabilitation. It amends the Vocational Rehabilitation Act which was expanded in the 84th Congress.

Vocational Rehabilitation Planning (P.L. 85-213)—This amends the Vocational Rehabilitation Act by extending the time federal funds may be used for planning, preparing and initiating expansion of programs in the states. Congress was asked to act when the July 1 deadline approached with considerable unexpended funds on hand.

Codification Veterans Laws (P.L. 85-56)—Without making any substantive changes in existing law, this Congress brought into a single code all veterans benefit laws, including those providing for hospital and medical care. Some of the laws date back 30 years.

Poultry Inspection (P.L. 85-172)—Under this law, federal inspection of poultry moved in interstate commerce becomes compulsory.

Military Nurses Incentives (P.L. 85-155)—In line with earlier efforts to make careers in the military more attractive, Congress passed this law improving career prospects for military nurses by making more and higher ranks available.

Pulmonary Tuberculosis (H.R. 1264)—The bill declaring veterans suffering from active pulmonary tuberculosis to be permanently and totally disabled for pension purposes while hospitalized passed the House, but is pending in the Senate Finance Committee.

Hearing Held But No Further Action Taken

Bricker Amendment (S.J. 3)—The long-standing proposed amendment to the Constitution by Senator Bricker (R., Ohio) limiting the domestic effect of treaties and other international agreements.

Civil Aviation Medicine (S. 1045)—Would establish in the Civil Aeronautics Administration an Office of Civil Aviation Medicine along with a Medical Research Institute.

Welfare-Pension Plans Registration (S. 1122, S. 2888)—Provide for registration, reporting and disclosure of employee welfare and pension benefit plans. Both House and Senate Committee hearings held and some action expected next session.

Highway Safety (S. 1292)—Hearings in House but not on any specific bills. Proposals include compulsory installation of safety belts.

OVR Pilot Center (S. 2068)—Would give the Office of Vocational Rehabilitation authority to use federal funds for construction of facilities for a pilot rehabilitation center in the Washington area.

Non-service-connected Care (H.R. 58)—Would impose added requirements on veterans with non-service connected disabilities seeking hospitalization or domiciliary care in VA facilities.

Barbiturates Control (H.R. 503 & others)—Regulate the manufacture, distribution and possession of habit-forming barbiturate and amphetamine drugs, and provides for registration and record-keeping, but with doctor exempted.

Department of Civil Defense (H.R. 2125 & others)—Establish a new executive Department of Civil Defense which would have supremacy over the military in times of disaster in certain areas.

Salary Rise for V.A. Doctors (H.R. 6719)—Increases salaries of medical personnel in VA, and also raises optometrists to the level of physicians for purposes of pay.

Chemical Additives (H.R. 6747 & others)—Require pre-testing of many chemical additives to be used in food processing and marketing. The House has held extensive hearings on this subject.

Grants-in-Aid-Study (H. Res. 312)—Provides for a Select Committee of the House to study federal grants-in-aid to state and local governments, and other groups. It got as far as House Rules Committee approval.

Advisory Group for Blind (H.R. 8427)—Establishes a temporary National Advisory Committee for the Blind.

Bills Still in Committee; No Hearings Held

Hospitalization for Aged (H.R. 9467, 9448 & others)—Various bills provide through different approaches a certain number of days of free hospitalization each year for Old Age and Survivors Insurance recipients and beneficiaries, some bills also would pay in-hospital surgical and medical care costs.

Compulsory Health Insurance (S. 844, H.R. 3764)—A 1957 version of the old and rejected national compulsory health insurance measures of 1948, the sponsors being Senator Murray (D., Montana) and Rep. John Dingell, Jr. (D., Mich.).

Liberalizing OASI Coverage (S. 173 & others)—These measures would liberalize the age and coverage requirements in the OASI disability program.

OASI Coverage for Doctors (H.R. 8883)—Physicians would be brought under Social Security on a compulsory basis.

Jenkins-Keogh Plan (H.R. 9 and 10)—Defer federal income taxes on portions of earnings of the self-employed for the purchase of retirement plans.

OASI Tax Increase (H.R. 7669)—Increases the wage base from the present \$4,200 to \$6,000 in computing the OASI tax.

Federal Workers Health Insurance (S. 2339 & others)—Provide for a voluntary, contributory health insurance program for

federal employees and their dependents, both basic and major medical coverage.

Overseas Federal Medical Care (H.R. 6141)—Provides health and medical services for U.S. civilians overseas who are employed in government jobs, and also would cover their dependents.

Federal Medical School Aid (H.R. 6874)—Authorizes federal grants to medical schools and research facilities for construction of classrooms and laboratories for teaching.

National Radiation Institute (S. 1228 and H.R. 4820)—Establish a National Radiation Health Institute within the National Institutes of Health.

Lobbying Amendments (S. 2191)—Would rewrite regulations covering lobbyists and lobbying in Congress.

Federal Loans to Hospitals (H.R. 1979)—For those hospitals interested in construction loans rather than Hill-Burton grants, these bills would authorize long-term government loans.

Reinsurance (S. 1750 and H.R. 6506)—Permit pooling by various insurance companies without regard to the anti-trust laws for purpose of encouraging new experiments in health insurance coverage.

Aid for the Aged (H.R. 383 and others)—Authorize grants for studies and projects for the aged.

Federal Advisory Health Council (H.R. 2435 & others)—Establish a Federal Advisory Council on Health, as recommended by the Hoover Commission.

Longshoremen's Act (H.R. 7303 and S. 2400)—Amend the Longshoremen's and Harbor Workers Compensation Act so that injured workers can select their own physician and hospital.

Labeling for Household Use (H.R. 7388 & others)—Regulate the labeling of hazardous substances intended for household use.

County Societies To Participate In Civilian Defense Conference

The Council on National Defense, American Medical Association, is sponsoring the eighth annual conference of the County Medical Societies Civil Defense Organization. The conference will be held at the Morrison Hotel, Chicago, Illinois, on November 9-10, 1957. These yearly conferences are primarily arranged to inform and otherwise assist medical and health personnel to plan for their respective roles in disaster situations. Individuals are provided the opportunity during the conference to discuss and exchange information concerning emergency medical activities and to participate in workshop sessions dealing with civil defense affairs.

The conference program this year is specifically planned to acquaint individuals at local medical and health group levels with the results and recommendations of several operational test exercises which have been conducted under simulated disaster conditions. One of the features of the conference is comprehensive report on "hurricane Audrey 1957."

The conference group is self-supporting. As in the past, a \$12.00 registration fee is charged to defray the costs of the two luncheons and other administrative expenses of the conference. Individuals planning to attend the conference are urged to mail their registration cards and fees promptly. This alone will be most helpful and will facilitate the completion of arrangements for the conference.

The Morrison Hotel, 79 W. Madison Street, Chicago, has set aside a block of rooms for the convenience of conferees. Individuals are urged to contact the hotel directly for reservations, making mention of the conference.

Those desiring additional information about the conference are requested to contact Mr. Frank W. Barton, Secretary, Council on National Defense, American Medical Association, 535 N. Dearborn Street, Chicago 10, Illinois.

Sister Kenny Foundation Announces Scholarship

The Sister Elizabeth Kenny Foundation announces a continuance of its post doctoral scholarships to promote work in the field of neuromuscular diseases. These scholarships are designed for scientists at or near the end of their fellowship training in either basic or clinical fields concerned with the broad problem of neuromuscular diseases.

Kenny Foundation Scholars will be appointed annually. Each grant provides a stipend of from \$5,000 to \$7,000 a year for a five-year period, depending upon the Scholar's qualifications. Candidates from medical schools in the United States and Canada are eligible.

Inquiries concerning details should be sent without delay to: Dr. E. J. Huenekens, Medical Director, Sister Elizabeth Kenny Foundation, 2400 Foshay Tower, Minneapolis 2, Minnesota.

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Coming Meetings

HILLCREST MEDICAL CENTER 1653 East 12th St., Tulsa, Okla.

Lectures in Basic Science Given by Faculty Members of the University of Oklahoma School of Medicine.

Oct. 22—Heart Function: cardiac reserve, A. N. Taylor, Lecturer.

Nov. 12—Common Spinal Pathways, G. H. Daron, Lecturer.

Nov. 26—Cerebellar Structures and Function, G. H. Daron, Lecturer.

Dec. 10—Autonomics: Structure and Function, G. H. Daron, Lecturer.

Dec. 17—Central Autonomic Function as related to common medical diseases, C. G. Gunn, Lecturer.

Jan. 14—Sympathetic and Parasympathetic Drugs, P. W. Smith, Lecturer.

Jan. 28—Newer Brain Drugs and their Relation to the Hypothalamus, C. G. Gunn, Lecturer.

Feb. 11—New Sedatives: Narcotics and Narcotic Antagonists, A. A. Hellbaum, Lecturer.

Feb. 25—Common Metabolic Pathways, A. T. Bever, Lecturer.

Mar. 11—Anticoagulants, E. G. Larsen, Lecturer.

Mar. 25—Estrogens and androgens, A. T. Bever, Lecturer.

April 9—Adrenal Steroids; Aldosteronism, R. W. Payne, Lecturer.

April 30—Thyroid: Recent Advances in Diagnosis and Treatment, R. W. Payne, Lecturer.

May 13—Pulmonary Function, M. T. Lategola, Lecturer.

May 27—Basic GI Physiology, J. W. H. Smith, Lecturer.

June 10—Physiological Basis of Liver Function Tests, E. G. Larsen, Lecturer.

June 24—Alimentary Reserve: the malabsorption syndrome, J. W. H. Smith, Lecturer.

Grobyson County Medical Society's Second BLACKFORD MEMORIAL LECTURESHIP Denison, Texas November 5, 1957

Guest speakers for the second Blackford Memorial Lectureship will be Dr. Conrad G. Collins, Professor of Obstetrics and Gynecology, New Orleans, Louisiana; Dr. J. R. Maxfield, Jr., Radiologist, Dallas, Texas; Dr. C. M. Pomerat, Anatomist, Galveston, Texas; and Dr. Edgar J. Poth, Professor of Surgery, Galveston, Texas.

OMAHA MID-WEST CLINICAL SOCIETY POST GRADUATE STUDY

November 4, 5, 6, 7, 1957

Sheraton-Fontenelle Hotel, Omaha, Nebraska

The Omaha Mid-West Clinical Society will sponsor a four-day Annual Assembly of Postgraduate Study on November 4-7, 1957, at the Sheraton-Fontenelle Hotel in Omaha, Nebraska.

There will be twelve guest speakers, informal discussions following luncheons and dinners, scientific exhibits, scientific motion pictures, and technical exhibits. There will be 38 lectures by faculty members of the University of Nebraska College of Medicine and of Creighton University School of Medicine plus four panel discussions.

The Assembly is approved for Category I credit by the American Academy of General Practice; the registration fee is \$7.50.

For further information write James J. O'Neil, M.D., Director of Clinics, 1031 Medical Arts Bldg., Omaha, Nebraska.

Postgraduate Division UNIVERSITY OF OKLAHOMA MEDICAL CENTER SHORT COURSE SERIES

Oct. 9—Pediatrics—Obesity in Childhood.

Nov. 13—Surgery—Biliary Tract Disease.

Dec. 11—Medicine—Problems in Pulmonary Diseases.

Jan. 8—Pediatrics—Growth Failure.

Feb. 12—Surgery—Urology Symposium and C. B. Taylor Lectureship.

Mar. 12—Medicine—Pathogenesis and Treatment of Anemia.

April 9—Anesthesiology—Anesthesia for the Part-Time Anesthetist.

May 14—Pediatrics—Pediatric Allergy.

June 11—Surgery—Surgical Diagnosis and Problem Clinic.

The courses are designed so physicians may attend four hours of formal instruction in the above fields while spending only one-half day from their office. This series is approved for credit by the Oklahoma Academy of General Practice.

Time 3:30 to 8:30 p.m. the second Wednesday of each month.

Place: Room 120, Medical School Building.

Registration: \$3.50 per session; \$25 for the entire series includes dinner, Hospital Cafeteria. Mail registration to office of Postgraduate Instruction, University of Oklahoma Medical Center, Oklahoma City 4, Oklahoma.

AMERICAN COLLEGE OF SURGEONS

Sectional Meeting

Stotler Hilton Hotel Dollos, Texas

JANUARY 9-11, 1958

Dr. Frank H. Kidd, Jr., and a Committee of Dallas Surgeons have planned a well-balanced program of interest to general surgeons as well as surgical specialists. Subjects range from Chemopallidectomy for Parkinson's Disease to Bomb Phenomenology.

All members of the medical profession are invited to attend.

Sectional meetings of the American College of Surgeons draw on surgeons of outstanding ability to discuss problems encountered in daily practice, and to disseminate information about new techniques. A luncheon is the keynote to all College programs, which are planned by local committees answering the needs of doctors within the meeting area. Panels, symposia, papers, medical motion pictures, and question and answer periods characterize the meetings.

Two new features are scheduled for each Sectional Meeting this year: a Fellowship Luncheon, at which a panel of College officials will answer questions about the entire program of College activities, and in turn, pose questions to the audience; and a social, rather than scientific, dinner meeting to which program participants, visiting surgeons, wives and other guests are cordially invited for an informal and pleasant evening of entertainment.

First Oklahoma Colloquy on

ADVANCES IN MEDICINE

February 6, 7, and 8, 1958

The first Oklahoma Colloquy on Advances in Medicine will be held February 6, 7, and 8, 1958. The meeting will be devoted to problems on Fluid, Electrolyte and Nutritional Balance and is under joint sponsorship of the Department of Medicine, University of Oklahoma, Division of Postgraduate Education, University of Oklahoma and the Baxter Laboratories.

Eight nationally prominent investigators in this field will participate and present the results of original work from their laboratories. Among the guest speakers will be Dr. Curtis Artz, Associate Professor of Surgery, University of Mississippi; Dr. Ronald Cooke, Chairman, Department of Pediatrics, Johns Hopkins School of Medicine; and Dr. J. Russell Elkin, Associate Professor of Medicine, University of Pennsylvania.

Registration is open to all physicians. Further information may be obtained by writing to the Division of Postgraduate Education, University of Oklahoma School of Medicine, Oklahoma City, Oklahoma.

Fourth Annual Meeting, Red Valley Section OKLAHOMA CHAPTER, AMERICAN ACADEMY OF GENERAL PRACTICE

Sunday, October 20, 1957

Loke Murroy Lodge, Ardmore

Carroll M. Pounders, M.D., Professor of Pediatrics

1. "Preventive Allergy in Pediatrics"
2. "Fevers of Undetermined Origin in Infants and Children."

Gerald Rogers, M.D., Clinical Professor of Gynecology

1. "Surgical Treatment of Post-Operative Vesico-Vaginal Fistula"
2. "Adeno-Genital Syndrome"

DIABETES WEEK

(Continued from Page 482)

Association for the past several years, it has been a great source of pleasure to learn of the gradual success which physicians have met in connection with lowering the percentage of complicated diabetes in the hospitals and in their offices and, as a member of that committee and as chairman of the state committee and of the Oklahoma County Medical Association committee on Diabetes Detection and Education, it is again my pleasure to call to your attention this splendid program for November 17 to 23, 1957, and solicit your earnest cooperation.

May we as physicians be more diligent in the performance of frequent urinalysis and blood sugars and may we also not forget to instruct our diabetic patient that other members of the family are much more likely to have diabetes than those who do not have it in their families. Also watch the overweight and over forty patients carefully for diabetes and last, but not least, make a special effort to remind the diabetic who has strayed from his diabetic management and warn him to the effect that he is subject to the same complications as the unknown diabetic who is entirely untreated.

Joslin has said, "There is enough knowledge today for the adequate treatment of diabetes, but it needs more general and more intense application and the development in the patient for a deeper sense of his own responsibility for his care."—*Hugh Jeter, M.D.*

Organization News

Second Councilor District Holds Meeting in Cushing

Cushing was the site of the Second Councilor District's Annual dinner meeting, September 17. A record number of physicians and their wives attended the event which was held in the Hotel Cushing.

Each year, this area meeting represents the first fall meeting for the three County Medical Societies comprising the District. Counties represented were Kay, Noble, Payne, Pawnee and Osage.

Special Guests

Special guests for the evening were John Flack Burton, M.D. and Doctor and Mrs. John Powers Wolff of Oklahoma City and Mrs. Iron H. Nelson, Tulsa. Doctor Burton is President of the Oklahoma State Medical Association, Mrs. Wolff is President of the Woman's Auxiliary to the O.S.M.A. and Mrs. Nelson is President-Elect of the Auxiliary group.

Doctor Burton, the principal speaker of the evening, talked to the group on the development of commercial health insurance and voluntary pre-paid health programs, pointing out the physician's role in these changing economic concepts of providing health care.

Doctor Gardner Honored

C. C. Gardner, M.D., Ponca City, was honored with the presentation of a Life Membership in the state organization. Due to illness, Doctor Gardner was unable to be present and his longtime friend Robert B. Gibson, M.D., Ponca City, accepted the award.

Powell E. Fry, M.D., Stillwater, Councilor for the Second District, presided during the program. He was assisted in arranging the meeting by J. W. Murphree, M.D., Vice-Councilor from Ponca City. Clifford M. Bassett, M.D., Cushing, was in charge of local arrangements.



TOP—Robert B. Gibson, M.D., receives the Life Membership Certificate in behalf of his longtime friend C. C. Gardner, M.D. BELOW—John Flack Burton, M.D., President of the Oklahoma State Medical Association was principal speaker of the evening.

O.S.M.A. To Host Medical Students

On October 14, the officers and councilors of the Oklahoma State Medical Association will be hosts to the University of Oklahoma Chapter of the Student American Medical Association at a dinner meeting in Oklahoma City. Approximately 350 students and physicians are expected to attend the meeting which will be held at the Hillcrest Country Club.

Principal speaker for the evening will be John Flack Burton, M.D., President of the O.S.M.A. who will talk on the future of medicine and stress the important role to be played by organized medicine in the years to come.

Rounding out the indoctrination theme, descriptive information pertaining to the function and services of both the A.M.A and O.S.M.A. will be distributed.

As an innovation to previous meetings, preceptors and students from all over the state have been invited to attend in addition to the medical students currently residing in Oklahoma City.



KENNETH McFARLAND, Ph.D., nationally known lecturer and speaker, will be guest speaker at the Oklahoma County Medical Society Dinner on Monday. Doctor McFarland who makes his home in Topeka, Kansas, is consultant for General Motors and the American Trucking Association. On Tuesday evening, there will be a social hour followed by nine specialty group dinners. Wednesday evening, to climax the three day conference, the annual dinner-dance sponsored by the Oklahoma City Chamber of Commerce will be held.

Oklahoma City Clinical Society Schedules 27th Annual Meeting

The Oklahoma City Clinical Society will open its twenty-seventh annual three day conference at the Biltmore Hotel on October 28, 1957.

An outstanding program of postgraduate teaching has been arranged. This includes lectures and discussions by fifteen distinguished guest speakers selected from various medical and teaching centers throughout the nation. In addition to the general assemblies there will be specialty lectures, a clinical pathologic conference, and daily luncheon roundtable question and answer sessions.

The Conference has been approved for credit under category I by the American

A.M.A. Public Relations Institute Held in Chicago

The 1957 American Medical Association Public Relations Institute was held August 28 and 29 at Chicago's Drake Hotel. The attendance was exceptional with total registration of 402. Representing Oklahoma were: E. C. Mohler, M.D., President-Elect of the Oklahoma State Medical Association of Ponca City; A. T. Baker, M.D., of Durant who is on the Public Policy Committee; Dick Graham, Executive Secretary, Alma O'Donnell and Leona Duncan of the Oklahoma County Medical Society, and Jack Spears of Tulsa County Medical Society.

The entire morning of the first day was devoted to two panel discussions covering problems of science writers and the working press, and problems involving release of stories by medical schools and pharmaceutical companies. Eleven persons, including two prominent newspaper science writers and one magazine writer, took part.

The afternoon was devoted to individual public relations problem-solving sessions covering both large and small state medical societies, and county medical societies with and without executive secretaries.

Sessions the next day dealt with grievance committees and their work, medical legislation, and professional liability.

Academy of General Practice. Registration fee for Association Members is \$20.00 which includes all features of the meeting.

The Clinical Society officers are: Herman Fagin, M.D., President; Charles Hugh Wilson, M.D., Director of Clinics; Ralph A. Smith, M.D., Vice-President; Vernon D. Cushing, M.D., Secretary; and Thomas C. Points, M.D., Treasurer.

A cordial invitation is extended to all physicians who are members of their County Medical Societies to attend this meeting from October 28th through October 30th.

For further information write Mrs. Alma O'Donnell, 503 Medical Arts Bldg., Oklahoma City.

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Medical Lobbying Costs Sketched for Second Quarter

Congress continues to publish expenditures of registered lobbyists. Yet these figures lack real meaning, either comparatively or in the absolute, because—among other reasons—of variations employed in the prorating lobbying costs. It is highly questionable, for example, that in the second quarter of 1957 the nursing lobby was more than six times as active as the optometric lobby, although A.N.A. expenditures in this three-month period were \$3,233.44 and A.O.A.'s were an even \$500, according to reports filed by the associations in compliance with National Lobbying Act.

American Medical Association and American Hospital Association were not far apart in their lobbying expenditures, \$12,244.03 and \$11,289.08, respectively. Alabama State Medical Association attributed \$2,725 to lobbying expenses; Health Insurance Association of America, \$318.36, and American Osteopathic Association \$482.37.

Individuals filing financial reports for the April-June quarter included Washington representatives of A.M.A., A.H.A., A.N.A., Civil Aviation Medical Association, American Osteopathic Association, Western Medical Corporation, National Chiropractic Insurance Company.

Oklahoma City, Norman To See A.M.A. Exhibit

One of the most popular exhibits at the Association-Sponsored Cavalcade of Health is being brought back to Oklahoma for special showings in the Oklahoma City High Schools and at the University of Oklahoma, Norman. "Life Begins," an A.M.A. exhibit portraying the story of human reproduction, has been scheduled for a return appearance November 11 through November 26.

Oklahoma City School Officials are making arrangements to display the exhibit in all highschools of the area and James O. Hood, M.D., Director of the Student Health Service at the University of Oklahoma plans to place it on exhibition at the Student Union Building on the campus.

A.M.A. Plans Clinical Meeting

The birthplace of American independence—Philadelphia—will be the scene of the American Medical Association's 11th Clinical Meeting December 3-6. Center of activities will be Convention Hall where scientific exhibits, color television, motion pictures, technical exhibits and scientific lectures will be presented "under one roof." Headquarters for the House of Delegates will be the Bellevue-Stratford Hotel.

Highlights of the three-and-a-half day convention geared especially for the nation's family doctors include: (1) Special transatlantic conference between distinguished physicians in London and Philadelphia on "Advances in Chemotherapy of Cancer" via two-way telephone at 3 p.m. EST Wednesday; (2) Complete color television schedule of surgical demonstrations emanating from Lankenau Hospital; (3) Motion picture program daily plus a special session Tuesday evening; (4) Exhibits featuring a well-rounded program and special displays on the history of medicine in the Philadelphia area, fractures and manikin demonstrations on problems of delivery; (5) Panel discussions on cardiovascular disease, cancer, emotional problems of menopause, hypertension, diabetes, arthritis, traumatic injuries; (6) The General Practitioner of the Year Award to be presented by the American Medical Association to an outstanding family doctor.

Safety Belts Favored

The House Interstate subcommittee on Traffic Safety has come out in favor of safety belts for the motoring public, provided the belts are properly manufactured and installed. The group, headed by Rep. Kenneth Roberts (D., Ala.), made no suggestions for any legislation, however. It stated: "The subcommittee feels that if the public has the opportunity to review the facts, it will recognize the great safety value in using a seat belt." A number of medical witnesses testified at hearings in the last session.

Health Insurance Coverage Continues To Grow

Voluntary health insurance against costs incurred through sickness and accident continues to spread its protective coverage over more and more Americans.

The Health Insurance Institute, taking a forward look to year-end growth figures, predicts that by December 31, 1957 over 123 million people in the U.S. will be protected by some form of health insurance designed to help pay hospital, doctor or other medical care bills. This represents close to 75 per cent of the total U.S. civilian population.

Breaking down the national totals on health insurance coverage for 1957, an estimated 109 million persons will be covered for surgical expenses, 74 million will have regular medical expense protection, 13 million will be insured against major medical expenses, and 43 million for loss of income coverage, in addition to the 123 million protected against the cost of hospital bills. Biggest growth in the type of coverage in recent years has been major medical expense insurance which helps to absorb the cost of serious, or catastrophic, illness.

Health insurance today covers more people than any other single type of insurance in force, the Institute reports.

Total health insurance benefits paid out this year by insurance companies, Blue Cross-Blue Shield and miscellaneous plans, will amount to an estimated \$4.2 billion, as compared to \$3.6 billion in 1956, the Institute said. This accounts for a major contribution to the nation's over-all medical bill.

The Health Insurance Institute is the central source of information for the nation's insurance companies, serving the public through voluntary health insurance.

Tulsa Doctor Wins Tournament

E. Malcom Stokes, M.D., Tulsa obstetrician and gynecologist, took top golfing honors at the Annual Physicians and Dentists Golf Tournament of the Tulsa County Medical Society on September 18, 1957, at

Ways and Means Committee Details Plans for Tax Hearings

Nearly four months before it begins hearings, the House Ways and Means Committee has outlined in detail plans for an election-year study of taxation problems. Included on the agenda is the Jenkins-Keogh proposal for tax deferement until retirement of funds paid into annuity plans. The American Medical Association has joined with an inter-professional group, the American Thrift Assembly, in advocacy passage of such legislation.

Committee Chairman Jere Cooper makes these points: (1) Because of the "extremely limited time available," tax hearings will be held to the period from January 7, the day Congress reopens, to February 7, (2) three broad areas will be studied—income taxes, estate taxes and gift taxes, (3) in order to keep down the number of witnesses, groups should combine and coordinate their presentations, and (4) written statements should be submitted to the committee by December 15. Mr. Cooper says the burden of taxation on citizens is heavy and that it is his hope that some relief can be achieved next year as a result of the hearings and study.

Tulsa Country Club.

It was the fourth consecutive year that Doctor Stokes had won the tournament. Last year he retired the Doctor W. Albert Cook Trophy. This year he won his own trophy!

William A. Waters, M.D., was runner-up, winning the Doctor H. D. Murdock Trophy. Paul N. Atkins, Jr., M.D., was third.

Warren F. Streck, M.D., led in the Dentists division, winning the Tulsa County Dental Society plaque.

About 115 golfers participated. Over 80 merchandise prizes were distributed in addition to the trophies, all donated by Tulsa merchants.

The event was under the direction of Simon Pollack, M.D., assisted by Dan E. Brannin, M.D., Paul N. Atkins, Jr., M.D., and E. Malcolm Stokes, M.D.

Book Reviews

Expectant Motherhood. Nicholson J. Eastman, M.D. Cloth binding, \$1.75. Pp. 194. Published by Little, Brown & Co., 34 Beacon Street, Boston 6, Massachusetts. Copyright 1957.

This new edition of a standard book is designed to help the prenatal patient and her family through her pregnancy, labor and delivery, and the post partum trials as easily as possible. The 194 pages in 11 chapters are well written and practical.

When the practicing obstetrician can get his patients to read the entire text countless hours and as many worries may be spared the parturient-to-be. Should she read only the one and a half pages devoted to "How to Telephone Your Doctor" the book would have proved its value.

Weight control in pregnancy is concisely and clearly presented; the suggested methods of preparing foods can be of help to the more experienced cook in limiting the caloric intake.

The question of painless childbirth and natural childbirth is treated from a broad and unemotional viewpoint and the final chapters on convalescence with care of the newborn complete an excellent book.—*Dixon N. Burns, M.D.*

Organized Home Medical Care in New York City. The Hospital Council of Greater New York, fabric cover. Pp. 537, \$8.00. Published by Harvard Press.

In 1954, when this study was undertaken, there were 19 organized medical care programs in New York City which provided medical, nursing, and social services to patients in their own homes. Eighteen of these

were hospital-based programs which served 2,059 patients at the time of study; the nineteenth was the chronic care service of the Department of Public Welfare. This book presents the findings and recommendations of the study group.

Data are presented on the type of patients being served and their families, including diagnoses, length of illness, economic level, housing, size and composition of family and social problems needing attention. The attitudes of patients and their families toward the various home care programs were also studied. The services offered were surveyed and unmet needs noted. Personnel providing services included physicians, nurses, social workers, laboratory technicians, physical therapists, occupational therapists, and home-makers. The individual programs were examined as to administrative organization, numbers and qualifications of personnel, case-finding techniques, sources of referral, and policies for acceptance or rejection of patients suggested for home care services. The extent of supervision given personnel and the use of these programs in education and research were also studied. Extensive appendices give details of the individual programs.

The ultimate aim of this survey was to provide information on which to base subsequent planning of an adequate home care program. The recommendations of the study group are quite explicit and cover all aspects of such a program. This book, therefore, will be of great interest to anyone concerned with the planning or operation of an organized home medical care program.—*William W. Schottstaedt, M.D.*

Deaths

SIDNEY S. T. HINES, M.D.
1870-1957

Sidney S. T. Hines, M.D., 87, died August 26, 1957 in Campti, Louisiana. He graduated from the College of Physicians and Surgeons, Dallas, Texas, in 1905.

Doctor Hines was a member of Cherokee-Adair County Medical Society, a Life Member of the Oklahoma State Medical Association and the American Medical Association.

ROBERT E. LEE RHODES, M.D.
1876-1957

Robert E. Lee Rhodes, M.D., died in Tulsa on August 31, 1957. Doctor Rhodes, 81, was a native of Grand Saline, Texas, moving to Tulsa in 1913.

Doctor Rhodes received his Doctor of Medicine Degree from the Southern Methodist University College of Medicine in 1905 and served three years as an interne at St. Paul's Sanitarium in Dallas. He was given an honorary Doctor of Medicine degree by Baylor Medical College.

He was a Life Member of the Tulsa County Medical Society, the Oklahoma State Medical Association and the American Medical Association.

BARTON H. WATKINS, M.D.
1889-1957

Barton H. Watkins, M.D., 68, died in Oklahoma City on August 23, 1957. Doctor Watkins was born in 1889 in Gentry county, Missouri, moving to Hobart in 1928. He was a graduate of St. Louis University Medical School in 1916.

Doctor Watkins was a member of the Kiowa-Washita County Medical Society, a Life Member of the Oklahoma State Medical Association and the American Medical Association.

EDWARD K. WITCHER, M.D.
1891-1957

Edward K. Witcher, M.D., 66, died September 17, 1957 of a heart attack. Dr. Witcher was a staff member at Eastern State Hospital, Vinita.

Dr. Witcher was born in Olney, Illinois, in 1891. He received his Doctor of Medicine degree from Northwestern University Medical School of Illinois. He did his post-graduate work in Vienna, Austria and in Edinburgh, Scotland.

Dr. Witcher was a member of the Craig-Ottawa Medical Society of which he was formerly president. He was also a member of the Oklahoma State Medical Association and the American Medical Association.

DAVID A. MYERS, M.D.
1875-1957

David A. Myers, M.D., 82, former President of the Oklahoma State Medical Association, died September 26, 1957, in Letterman General Hospital, San Francisco, California.

Dr. Myers practiced medicine in Lawton and served as President of the O.S.M.A. in 1910-1911. He was born in Wisconsin and graduated from McGill University.

Doctor Myers was Chief Surgeon of the Army Medical Corps during World War I and was developer of the blind-flying technique used by pilots.

EDGAR EUGENE RICE, M.D.
1899-1957

Edgar Eugene Rice, M.D., died of a heart attack September 28, 1957 in Shawnee, Okla.

A native of Indiana, Doctor Rice has resided in Shawnee since he was two years old. Doctor Rice graduated from Northwestern University and did post-graduate work at

University of Edinburg and the University of Vienna.

Doctor Rice was a member of the American College of Surgeons, Oklahoma State Medical Association, Pottawatomie County Medical Society and a member of the editorial board of the *Journal* of the Oklahoma State Medical Association.

CARL PUCKETT, M.D.
1882-1957

Carl Puckett, M.D., managing director of the Oklahoma Tuberculosis Association, died September 27, 1957, at the age of 74. Dr. Puckett was born in Rogers, Arkansas, and was graduated from St. Louis College of Physicians and Surgeons in 1905.

Dr. Puckett entered private practice at Pryor, Oklahoma, serving as staff physician at Whitaker State Home and as Mayes County Superintendent of Health.

After serving three years as state Health Commissioner, Dr. Puckett was appointed Director of the Tuberculosis Association, which position he held 30 years.

Doctor Puckett helped organize the Northern District Indian Territory Medical Society in 1906 and was elected first secretary of the organization. He was a member of the Mayes County Medical Society, the Oklahoma State Medical Association and the American Medical Association. Doctor Puckett was awarded a Fifty Year pin in recognition of his fifty years service in the medical profession.

PHYSICIAN PLACEMENT

Anesthesia

Daniel B. Perry, Residence Quarters, Harlem Hospital, New York, N. Y., age 48, Meharry Medical College, 1948, interned at Harlem Hospital, New York and served residency in anesthesia there, veteran, available December, 1957.

General Practice

David L. Mossman, USAH, Orthopedic Department, Ft. Riley, Kansas, age 28, married, University of Vermont, 1954, available upon separation from service, December, 1957.

Internal Medicine

Louis K. McCown, 1516 Third Ave., N.E., Rochester, Minnesota, age 33, married, Tulane, 1949, Residency at Mayo Clinic, Veteran, available January 1, 1958.

Bartis M. Kent, 225 Koser, Iowa City, Iowa, age 32, married, Baylor, 1948. Three year residency at Baylor, veteran, available July, 1958.

Neurosurgery

Bahif S. Salibi, M.D. (Currently Captain, MC U. S. Army) 121 Evac. Hosp., APO 971, San Francisco, California, age 35, married, Board qualified in Neurosurgery, except for the two years of private practice required by the Boards, available October, 1958.

Pediatrics

Marilynn L. Miles, Kemmerer Bldg. Norton, Virginia, age 36, single, Albany Medical College, 1950, residency at University of Michigan, available immediately.

James A. Dugger, 1510 Southern Ave., Kalamazoo, Michigan, age 35, married, University of Oklahoma, 1946, three years residency in pediatrics, veteran, available September 1, 1957.

Urology

John C. Brazos, 406 South Washington, Watertown, Wisconsin, age 36, married, University of Illinois, 1949, interned at Anckee County Hospital, St. Paul, Minnesota, residency at Milwaukee County Hospital, Milwaukee, Wisconsin. Veteran, available upon completion of residency, July 31, 1957.

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25 YEARS AGO



**Low Back Injuries with Particular Reference to
the Part Played by Congenital Abnormalities**
Frank D. Dickson, M.D.—Kansas City, Ma.

" . . . 1. Congenital abnormalities of the lumbosacral articulation occur in approximately 35% of all individuals producing an architecturally weak back.

"2. Clear skiagrams taken in the proper manner will reveal the presence of congenital abnormalities if carefully studied.

"3. When subjected to trauma the normal spine should and usually does recover under adequate treatment.

"4. When subjected to trauma the congenitally weak back returns to normal much more slowly and much less completely than does the normal spine.

"5. With a definite congenital defect present if adequate conservative treatment does not result in relief and elimination of disability stabilization of the involved region is definitely indicated . . . "

**The Health Department and the Physician in
Private Practice**
C. E. Woller, M. D.
**Assistant Surgeon General U. S. Public Health
Service, Washington**

"Reluctant as he may be to realize and admit it, one who comes frequently in contact with large numbers of practicing physicians and with representatives of local public health agencies cannot fail to see developing in many sections of the country today a more or less strained relationship between the health department and the doctor engaged in private practice. On the one hand, the physician sees, in all sincerity, the present-day activities of the health agency as the forerunner of what he visualizes as "State medicine" of the future; on the other side, this or that health officer complains of the lack of cooperation—even open hostility—of the medical profession. This situation seems all the more deplorable because of the very evident fact that most of the dissatisfaction which has arisen can be attributed to misunderstanding; and the writer of this paper cannot be honest without expressing his belief that responsibility for much of this misunderstanding, wherever it exists, can be laid at the door of the health officer himself as a result of his failure to take the local medical profession into his confidence and to request its advice and assistance in the planning and in the execution of his work. Although I

myself am the representative of a public health agency, many years removed from association with members of my profession as a practicing physician, I have sufficient faith in the altruism of the doctor in private practice, demonstrated by his traditional willingness to carry, often at sacrifice of himself, more than his part of a community burden by giving without recompense his services to the unfortunate, to know that at heart he is just a much interested in the prevention of unnecessary illness and mortality as is the health officer. And experience in local health work has convinced me of the belief that whenever the health department is willing to take its problems openly to the medical profession for free discussion and to seek the cooperation of the practicing physician on an amicable basis, the whole-hearted and enthusiastic support of the doctors usually will be forthcoming.

"On the other hand there is a wealth of good in the modern public health program which may result in material personal benefit to the private physician if he will forget for the moment his fear of 'State medicine' and take the trouble to see for himself what the health department may do for him. I refer particularly to the demand for medical service created by school medical inspections, periodic physical examinations, diagnostic clinics, educational activities, and the like. Moreover, it is my firm conviction that the public health agency can and will be the strongest ally of the medical profession in resisting the approach of 'State medicine' if you will permit the health officer to join with you in an effort to solve the problem you are now facing or with which you undoubtedly will be confronted in the future. Any trend which may be developing in this country toward 'State medicine' is the result of an underlying cause far more important than the activities of the health agency. The economic situation with which the doctor is confronted is affecting the public as well. People are beginning to wonder if the burden of medical care for certain groups, which falls ultimately upon the community as a whole, cannot be made lighter by preventing the need for such care. The individual who is not an indigent but who cannot pay the price of adequate service finds himself forced to go without or to seek some plan whereby the expense of medical attention may be lessened. In all seriousness, therefore, I venture to predict that should there develop in this country a conflict over the question of whether or not medical service shall be supplied by the State or the community, the controversy will be waged not between the health department and the physician but between the public and the medical profession. Why should not the public health agency and the practicing physician, before the situation becomes more difficult, join hands in working out a solution of the problem which will meet public health needs, give the doctor an opportunity to adjust himself to preventive medicine in private practice, and provide a plan under which every individual may receive adequate medical advice and care at a cost commensurate with his ability to pay, with just compensation to the physician for his services? . . . "

Salicylates, Glucocorticoids . . .

(Continued from Page 498)

**Note:* Each tablet of Pabalate^R (Robins) contains sodium salicylate, 300 mg., sodium para-aminobenzoate, 300 mg., and ascorbic acid, 50 mg. Neocylate^R (Central Pharmacal) contains sodium salicylate, 250 mg., sodium para-amino-benzoate, 250 mg., and ascorbic acid, 20 mg. per tablet; Neocylate with Cortisone^R (Central Pharmacal) contains an additional 5 mg. of Cortisone per tablet. Panate^R (Pitman-Moore) is composed of calcium salicylate, 325 mg., calcium pantothenate, 40 mg., menadione, 0.1 mg., and ascorbic acid, 10 mg. Cordex^R (Upjohn) contains acetylsalicylic acid, 300 mg. and prednisolone, 0.05 mg. in each tablet. Three hundred milligrams of acetylsalicylic acid was present in each aspirin tablet. Placebo doses contained various amounts of lactose, or Terramycin^R in one to ten milligram tablets or capsules.

Acknowledgments

We are grateful to Dr. C. J. O'Donovan of the Upjohn Company for financial assistance and supplies of Cordex^R prednisone (Deltasone^R) and prednisolone (Delta-Cortef^R); to Dr. Carl Bunde of the Pitman-Moore Laboratories for supplies of Panate^R; to Dr. Michael Carlozzi of the Pfizer Laboratories for supplies of prednisolone (Sterane^R); to Dr. Edward Henderson of Schering Corporation for prednisone (Meticorten^R) and prednisolone (Metacortalone^R), and to Dr. Carl Klemme of the Central Pharmacal Company for supplies of Neocylate^R and Neocylate with Cortisone.

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OFFICE SPACE for lease. Ten rooms, two lavatories, private parking, air conditioned, ground floor. Will rent half or lease all. 1225 North Walker or call FOrEst 5-4842 or TR 8-3311.

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WANTED: General Practitioner. Oklahoma license. Salary open. Family residence and maintenance available at nominal cost. Good setup for recent graduate, retired serviceman, or older man seeking regular hours and less strenuous work. Location adjacent to several recreational areas. Contact Superintendent, Oklahoma State War Veterans Home Facilities, Sulphur, Oklahoma.

FOR RENT: Medical Offices under construction N.W. 39th & MacArthur, Oklahoma City. In shopping center, parking. \$2.00 per square foot. WH9-5646.

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WANTED: General Practitioner for 40 bed hospital and clinic due to death of partner. Prosperous, growing West Texas town of 18,000. Principle industries oil and agriculture. Excellent starting salary and early partnership. If interested please call collect or write: Battenfeld-Jones Hospital Clinic, Inc., Administrator, Snyder, Texas.

Freedom of Choice of Physicians— What Does It Mean to Hospitals?

The following story appeared in the *St. Louis Post-Dispatch*, September 27, 1957.

"The growing concern of American physicians with world affairs, both as a means of spreading medical knowledge and to stave off government interference with medical practice was emphasized here last night by Dr. Austin Smith of Chicago, Editor of the *Journal of the American Medical Association*.

"Dr. Smith was a speaker at the annual banquet of the Mississippi Valley Medical Society at Hotel Sheraton-Jefferson. The Society's twenty-second meeting began Wednesday and ends today.

" 'There is a need for a new awareness of medicine's responsibilities,' Dr. Smith said, —'some of which members of the profession have sought, some of which have been thrust upon them.'

"He discussed the efforts of the World Medical Association, an organization that includes the A.M.A. and other private medical groups, to maintain three principles. He said the principles were the following:

" '1. Freedom of choice of the physician by the patient.

" '2. Freedom of choice of hospital

" '3. No restriction of medication or mode of treatment by the physician except in case of abuse.' "

These principles have been inherent in group plans of all types including Blue Cross-Blue Shield, insurance plans and Medicare. The Congress used these words regarding the matching formula for old age assistance in Public Law 880 which amends the Social Security Act—"to applicants for and recipients of old age assistance to help them *attain self-care*." Apparently Congress considered these principles inherent in this act also.

Some hospitals in Oklahoma refuse to permit a free choice of physician to recipients of old age pensions when money provided by the Welfare Department is their only means of payment.

These hospitals have abrogated principle No. 1 in the care of the older citizens under the provisions of this act and will, by having done so, either force the inclusion of galling safeguards in this and future efforts on behalf of the medically needy or remove these principles as limiting factors in their planning.

Are Editorials Unfair?

Yes, they are—when they attempt to impose an isolated point of view on moot questions about an opportunity for others to express their opinions. Such an opportunity does exist in letters to *The Journal* which will be published provided they are concerned with issues and not personalities. This should be one of the functions of *The Journal*: to provide a forum for the expression of and exchange of ideas. Since writing letters to *The Journal* is not a common practice and since the editors cannot count on them to explore the preceding editorial some attempt should be made to do this now:

Have the recipients of Old Age Assistance not previously been service cases?

For the most part they have. Our economy, however, has changed and it is even difficult for people over 50 to get jobs and it is almost mandatory that those over 65 quit work. As a matter of fact, if they earn more than a little they are not entitled to social security. We have some 100,000 people in the state who are receiving old age pensions. The question is: Are these people who are receiving old age pensions doing so because they have earned it during their productive period as workers, taxpayers and citizens or are they receiving it simply because it is the humane thing for the younger members of our society to take care of them. The editorial above assumes that the former is true and that the Congress in appropriating funds to help with their medical care also had this concept in mind. If you believe this, then you would consider that this

money which has been allocated is theirs to spend for hospital and medical care as they require it. They have the right to select the hospital and the doctor of their own choice.

Perhaps some effort should be made to separate the bums who are still bums at 65; but since this doesn't seem practical, it is better to upgrade the few bums to the rank of elderly citizens than to downgrade all the old people receiving pensions to the status of bums.

Why is an effort being made for a different approach to the medical care of ADC children?

Oklahoma has had a program for the medical care of dependent children for many years. The State Medical Association by action of the House of Delegates had made it an official policy for its members not to accept payment for medical services for children being cared for through the Crippled Children's Commission. In as much as there are many, many children who are being medically cared for by the Crippled Children's Commission who do not qualify for care under the ADC program, it would seem better for them all to be managed alike. The children being cared for under the ADC program are in that situation by accident of birth or circumstance and not because of old age. Almost all their life lies ahead of them and not behind them. It would seem better for their care to be seen to by the Crippled Children's Commission which has established procedures and lines of control best suited to the proper care of these children, that they may ultimately become self-sufficient citizens with as much of their original physical, mental, and emotional equipment intact as possible.

Hospitals are not supposed to do much more than break even in their operations—they must do this to continue to function—whenever they care for patients for less than cost they must increase their charges to their paying patients to come out even. Isn't this plan of urging the patient to bring in other resources to qualify for private patient care a good one to protect the paying patient from unfair charges?

It should be, but it is unsound for the Wel-

fare Department to pay less than cost or for the hospitals to accept less than their cost. Two wrongs do not make a right, even though it seems the expedient thing at the moment. It would seem better for the hospital to have gone along with the Welfare Department for the first trial period and at the end of that time to insist on rearrangement of provisions for care in such a manner as to insure payment of at least their costs, if this proved not to be possible under the present plan.

What are the hospitals to do for teaching material and for intern and resident training?

There are many, many patients being cared for under various types of insurance programs who in the past have been and now would otherwise be service cases. It is up to the hospitals to rearrange their programs for teaching and training with these alterations in our economy in mind.—B.H.N.

LeRoy Edgar Burney, M.D., M.P.H. Surgeon General U.S. Health Service

Doctor Burney visited Oklahoma City early in November. He appeared at the Friday Forum of the Chamber of Commerce and at an informal breakfast arranged by Doctor Burton. Those who think *bureau* is always a nasty word came away a little bit ashamed.

The sincerity and dedication of the man was apparent in every syllable. This dedication is not to aggrandizement for his department, but to the task of protecting community health and well being in matters not covered by the practicing profession. In doing this his department must integrate its own efforts with those of the State and Territorial Health Departments. This has been ably done all along, but we in Oklahoma have not before had the opportunity to understand what this cooperation means. A good example is the cooperative effort to measure radio-active fall out. Our health department monitors the fall out in Oklahoma. This information is sent to the U.S.-P.H.S. as is that from all other states and

(Continued on Page 589)

Guest Editorials

Carl Puckett, M.D.

"Doctor Puckett has the health conditions well in hand and shows that he is especially interested in the welfare of the little unfortunates." Thus reads a comment in the 1912 annual report of the State Commissioner of Charities and Correction. At this time, Doctor Puckett was in private practice in Pryor and served as physician for the nearby Whittaker Orphanage. This simple statement characterized the life work of this pioneer physician whose death recently occurred. The same volume contains his well-written report of conditions in the orphanage. In it is a statement that 45 percent of the orphans had lost one or both parents from tuberculosis; thus, reflecting an early interest in the disease which completely occupied the last 30 years of his life. This same annual report also contains still another illuminating little item. It tells of his adoption of one of the Whittaker Home children.

Carl Puckett had a warm, friendly smile, a keen mind and with it a number of qualities that set him a cut above most of us. He was a dedicated, selfless man of strong character, with definite convictions about how best to cope with life's problems. He never lacked the courage to stand up for these beliefs and always fought fairly. When one disagreed with him it never engendered bitterness. Another trait was his loyalty; for example, his attachment for Pryor and his early friends there never diminished.

Doctor Puckett made a substantial contribution to public health in Oklahoma while serving as State Commissioner of Health. He was the first to have a clear concept of what was needed to establish adequate pub-

lic health facilities for the State. He secured, with the aid of the Rockefeller Foundation, funds with which to establish our first fulltime county health departments. "The Oklahoma State Tuberculosis Association was organized in 1918. When Doctor Puckett became its director in 1927, it was in poor financial straits. During the ensuing years, he dipped into his pocket on two occasions to help keep it solvent. The 1930's were trying years for everyone but during this period Doctor Puckett battled along and set up local tuberculosis associations in nearly every county in the state. Organizing a voluntary group was one thing, but keeping it active and functioning every year is something else. That he succeeded is measured by the strength of the present organization and position it holds nationally. He was a strong believer in the responsibilities of the local government toward the people. If programs initiated by the Association showed merit, he then encouraged local and state government to assume the responsibilities of carrying them forward. His relations with the tuberculosis control division of the State Department of Health were always of the best. He cooperated in a manner which prevented any overlapping or duplication of activities of the two organizations. During the many long years that Doctor Carl devoted to the fight against tuberculosis the annual deaths in Oklahoma dropped from 1,350 to 170.

This pioneer physician was proud of such things as his renown as a grower of strawberries, his long record as an OU football fan, but his outstanding achievement was his simple devotion to duty. Following this path brought great achievement and a worthy inspiration for us to follow.—*Richard M. Burke, M.D.*

Scientific Articles

FETAL SALVAGE *in* OBSTETRICS

ROBERT A. COSGROVE, M.D., F.A.C.S.

A healthy child delivered of a healthy mother has always been the final successful achievement of the obstetrician by whatever name he or she may have been called. During the present era of good antepartum observation, hospital deliveries, blood banks, antibiotics, and other ancillary aids in taking care of the pregnant woman, her own chance of running afoul of serious danger had been reduced to a very small figure. Maternal Mortality Committees are now finding that probably more than half the deaths of mothers could have been prevented if they had been cared for with the maximum knowledge now available and with complete cooperation of all parties. Although I do not want to imply that we are near any millennium concerning maternal safety, I do wish to bring to your attention that while the maternal mortality has very steadily decreased over a large number of years there has been correspondingly a much less precipitous drop in fetal salvage. Actually in the last five or ten years the perinatal mortality rates have gone down very little.

The problem of delivering a live baby does not start at term when the woman starts her labor. Whether or not she ever gets pregnant is the initial point of any attempt to cause a favorable outcome so far as the child-bearing potential is concerned.

Table I indicates some of the factors concerned with those who cannot impregnate. The actual number of such unfortunate family groups is not completely known, but certainly the numbers of couples that apply for babies for adoption runs into the thousands yearly in the United States, and in addition there are many others of which there are no record who take their problem philosophically and do not seek medical advice.

It is trite to say that it takes two to pro-

THE AUTHOR

Robert A. Cosgrove, M.D., F.A.C.S., was graduated from Cornell University School of Medicine in 1936. Doctor Cosgrove resides in Jersey City, New Jersey, where his practice is limited to Obstetrics and Gynecology. He is Chief of Division at the Margaret Hague Maternity Hospital in Jersey City.

Doctor Cosgrove is a member of the American Association of Obstetricians and Gynecologists. He is certified by the American Board of Obstetrics and Gynecology.

The following discussion was presented at the Semi-Centennial Annual Meeting of the Oklahoma State Medical Association, Tulsa, Oklahoma, May 6, 1957.

duce a conception, and yet from a clinical standpoint we continually see young women who have been "worked up" rather vigorously, and yet whose husbands have never been examined. It is rather difficult to determine the exact number of couples in which the husband is the faulty individual, but the percentages seem to run about 40 percent. It is also a much simpler procedure to investigate the male than the female, and its omission in any investigation of infertility is indefensible.

The search for causes of infertility in the female is often time-consuming and usually involves considerable expense and discomfort. An adequate pelvic examination should determine any anatomical defects that may have a bearing on impregnation, but the investigation of the woman's functional ca-

TABLE I
CANNOT IMPREGNATE

MALE	FEMALE
Anatomic?	
Functional?	
Psychosomatic?	
General	Disease
Genital	Disease

capacity is not easy. Patency of the fallopian tubes can be determined by gaseous or radio-paque substances, and the results are generally satisfactory so far as such determinations are concerned. The treatment of obstructions on the other hand is quite another matter, and we do not believe that the various operations which have been conceived with the object of establishing and maintaining patency in previously closed tubes show sufficient promise that we can conscientiously recommend them except in most unusual circumstances.

The actual determination of ovulation is not quite as simple as some assume it to be. The evidence at best is "hearsay." In very few instances do we ever actually know by direct knowledge that an ovum has produced in any given menstrual cycle. We simply know that the individual either does or does not manifest the usual hormonal changes reflected in the endometrium or other parts of the body that usually represent such ovulation. There may be some question as to whether ovulation in the opposite ovary is always completely suppressed. It is well known that many pregnancies occur at times in the menstrual cycle that it should be impossible for conception to take place. Furthermore, even if it is determined that the woman is perfectly normal and healthy in every way and that her functional capacity is good, and she appears to ovulate, and her husband is normal and healthy, and seems to have good sperm, there is still a group of couples who do not attain their desire. From a clinical standpoint the principal interest in this statement is a warning not to be too optimistic in promising people that they simply need more time, or whatever it is that the average doctor is apt to tell such individuals when he finds nothing wrong and assumes that the two individuals are perfectly healthy simply because our knowledge isn't far enough advanced to determine some existing malfunctions of which we know nothing at present.

I believe there is no real question that tensions, fears, phobias, etc. may cause sufficient reaction in an individual that pregnancy is prevented; but it is a field in which I am not competent to discuss except to admit its existence.

Any severe systematic disease, particularly the various anemias, diabetes, tuberculosis and other chronic disease, will prevent conception; and if such diseases are the factor or only factor present, their correction will often allow conception to take place. The treatment of specific genital disease belongs in the same category. If such diseases are found, they should be treated before the patient is surveyed any further.

Fetal salvage is perhaps the wrong title to use when the foregoing matters are discussed, but in the long run more people who can be successfully treated for infertility the greater will be the number of children that are born healthy and alive, which after all is the prime objective of all obstetrics.

TABLE II

IMPREGNATES BUT ABORTS

- Endocrine Dysfunction
 - Ovary
 - Thyroid
 - Pituitary
- Anatomic Anomaly
- Pelvic Disease
- General Disease
- Psychiatric Factors

Table II indicates some causes of an unhappy group of individuals who have no trouble in conceiving but who do not carry their pregnancies through the first trimester. It is our impression that many of these people belong to a very broad category which might best be termed "general inadequacy." While it is not too difficult in the average individual to determine whether they have endocrine malfunctions, it is by no means a simple thing to bring such individuals to a normal enough physical state that they can become pregnant. I am not hopeful of the actual end-results so far as pregnancy goes in many of the individuals who show endocrine dysfunction. While it is true that many of them can be brought to what amounts to a chemical balance, and while it is true that often they can be made to menstruate normally, and in some instances can be made to ovulate, the actual percentage of pregnancies falls far short of the expectation of the clinician. Some pelvic anomalies may be corrected providing that we know that the conceptus is otherwise normal. It is unwise to attempt surgical repair of the various duplications of the genital

tract unless it is known that the patient is capable of satisfactory ovulation and has a normal endometrium. The treatment of localized pelvic disease and general systemic diseases also will afford an opportunity for continuation of the pregnancy if the conditions are corrected. It is my impression that many of the mild viral infections, such as the common gripe may cause as much damage as German measles or some of the other diseases that have been implicated in fetal anomalies. Psychiatric factors are somewhat difficult to determine accurately, but undoubtedly play a part in causing some of these women to abort before their pregnancy is well started.

TABLE III

Abnormal Implantation
Anomalous Fetal Development
Placental Aspects
(Cord Variations)

Table III indicates some of the factors in the conceptus which lead to defective pregnancy. If the implantation is too low in the uterus, or is in an area of endometrium in which nutritional facilities are under-developed, abortion will take place. Placenta previa or some other placental positional abnormality may result from low implantation even though satisfactory growth can occur. Some of these may approach term and may be saved. Anomalous fetal growth is a condition of which we know little except in a general way. Noxious influences, which may be poison, disease, infection, and perhaps even trauma may cause anomalous fetal development with the final production of monstrous babies. There is also evidence that there may be an hereditary tendency for the production of such monsters. A woman who has had one monstrous baby has a somewhat greater chance of having another than an individual who has none at all. Placental defects are often associated with other types of disease, particularly toxemic and hypertensive syndromes, and theoretically at least, the correction or amelioration of these should prevent some of the placental defects that cause the loss of the infant in utero. Cord variations are usually not susceptible of any treatment. They usually cause fetal death before any method of diagnosis is available, and when the baby is born the loops and

knots and abnormalities are noted for the first time.

A list of our maternal complications in stillborn babies in a recent survey is indicated in Table IV.

TABLE IV

**MATERNAL COMPLICATIONS
ASSOCIATED WITH STILLBIRTH**

Premature Rupture of Membranes
Abruptio of Placenta
Toxemias of Pregnancy
Prolapsed Cord
Placenta Previa
Maternal Infection
Dystocia
 Inlet
 Mid Pelvic
 Outlet
 Breech
Inertia
Diabetes
Anemia
Fibroids

The group as a whole is endless and includes almost any disease or accident that can happen to a woman in a childbearing age.

Premature rupture of the membranes is one of the most distressing situations that occurs in the last trimester of pregnancy. There is no premonition, and when it does occur it sometimes takes a nicety of judgment of the attendant to determine the best infant-saving procedure. If the membranes rupture when there is certain viability of the fetus labor should be induced to forestall infection. This may be done by the time-honored method of castor oil and enemas or by the use of other methods such as intravenous pitocin infusion. If the infant appears to be very small or insufficiently advanced in gestation to have a good chance of viability outside of the uterus, it is best to protect the patient by placing her in bed at strict rest, with sedation if necessary, and perhaps with the administration of some broad spectrum antibiotic to prevent ascending infection. The latter is a debatable point. It is our impression that unless there is uterine activity there isn't any great chance of infection going up into the amniotic sac. But since in such a situation a life is involved the possibility of danger of the use of antibiotics would seem to be secondary. It has been

possible to carry women six weeks and longer with constant leakage of fluid but with a baby continuing its growth. This is certainly better than the delivery of a premature baby who succumbs to the usual hazards of immaturity. It is of course needless to remind attendants in such a case that if there is certain death of the fetus, there is no point in wasting the woman's time, money and energy in expectancy. If the fetus is dead or there is evidence that it is a monstrosity, there is no point in withholding induction at any time. There have been recent glowing accounts particularly in the *Saturday Evening Post* of drugs which will inhibit premature labor. Discussions with some of the people that have had the opportunity to use such drugs indicate that they are not nearly as satisfactory as the original reports indicated. Another drug that is used for the inhibition of premature labor per se is progesterone in relatively large amounts. While I would not find fault with anyone who wanted to use it, our own experience with it has been disappointing, and our own tendency is to treat premature labor by rest and sedation only.

Toxemia of Pregnancy

The toxemias of pregnancies could be the subject of a whole meeting regarding both the treatment of the mothers and the effect on the survival of the infants. We divide the toxemias into two groups so far as the fetus is concerned. The first group, and the one which gives us the most concern, is the severe hypertensive types of disease together with the severe nephritic types of toxemia. It is our experience that these people do not carry their pregnancies well, that frequently the toxemia becomes worse during pregnancy, and that frequently there is death in the fetus in utero before viability. The individuals so afflicted should have the benefits of maximum obstetric care to the point of being hospitalized through most of their pregnancies. We know of no drugs that lead to consistently good results, nor do we believe that such individuals are ever good candidates for pregnancy. A certain few severe hypertensive individuals may be benefited by surgical reduction of their blood pressure, and perhaps may maintain lower levels long enough to become pregnant and have one

child which attains viability. In the long run we have found that these people are probably the poorest candidates for pregnancy of any that we handle.

The so-called specific toxemias of pregnancy, preeclampsia and eclampsia, on the other hand are generally amenable to a certain amount of control. If individuals with preeclampsia are promptly handled the disease does not get out of hand. Since it usually doesn't develop until the last trimester, if there is any uncertainty about the chances of fetal survival in utero, the termination of pregnancy either by induction of labor or by cesarean section usually results in a favorable fetal outcome. The principles of maintaining such individuals under reasonable control are rest, sedation, restriction of salt and caloric intake, and the use of certain of the anti-tensive drugs. I might say parenthetically that although there has been a rather large experience with the anti-tensive drugs in the severe fulminating types our rather moderate experience with their use in the lesser degrees of the disease has not convinced us of their general efficacy except as an emergency procedure in severe disease. We do not like to see pregnant women suffer preeclampsia for any great length of time. We think that the infant should be delivered after not more than a few weeks unless the disease can be notable decreased in severity. If the patient does not respond to the usual treatment, we think that one or two days is sufficient time to warrant a decision as to whether or not delivery is necessary. The same methods are used for eclampsia.

Hemorrhage

The bleeding complications of the last part of pregnancy threaten not only the fetus but the mother and over the last few years the treatment has become almost standardized. There are two principal methods of treating placenta previa. If the placenta previa is central a section should be the method of delivery. If a cesarean section is not necessary the other method is to rupture the membranes with or without the use of a pitocin infusion. There are perhaps times when the Willett clamp might be of some help, but the colpeurynters of years ago are generally considered unnecessary temporizing in the face of serious trouble. If the bleeding from a pla-

centa previa occurs early and the patient can be under maximal care, it is not even necessary to make a certain diagnosis. Such people can be observed for weeks at a time if necessary in the interest of fetal growth in utero. If there is no serious hemorrhage, and treatment isn't forced upon the attendant, there is no need to examine vaginally by any means that might cause hemorrhage simply in the interest of a diagnosis.

The other major obstetric hemorrhagic emergency is abruption of the placenta. If it is severe there is a certain fetal loss before much can be done about it. If the abruption is massive and sudden, the fetus dies in a matter of minutes. However, if the fetus is alive and the abruption is moderately severe, we believe that cesarean section is the best and fastest way to ensure a living baby. If the baby is already dead, or if the abruption is not very severe in a multipara, often rupture of the membranes is sufficient to produce a rapid enough vaginal delivery to save the infant. We believe that temporization accounts for a much higher fetal loss than need be borne. It may also lead to hemorrhagic states associated with blood clotting defects.

Disproportion

At the present time when the mortality of cesarean section is as low as it is and the dangers to the mother not overly great, no infant should die because of disproportion. If satisfactory progress hasn't been made in a reasonable time, an infant should not be allowed to pound its life out against unyielding maternal surfaces in an attempt to have a vaginal delivery at any cost. Certainly if a primigravida starts labor with a floating head and it doesn't soon engage, the obstetrician must be prepared to evaluate the case fairly promptly to insure satisfactory outcome. This would include pelvico roentgenograms by whatever technic the obstetrician or his roentgenologist are accustomed. This, however, is simply one more laboratory test in judging whether or not the patient will deliver. It is only a shadow and has no information whatsoever concerning either the uterine contractions, the precise size of the baby, or the baby's moldability. These latter factors must be assessed by personal examination. Engagement of a cephalic pole in the inlet

doesn't insure a satisfactory vaginal delivery. In the various funnel types of pelvis an obstructive labor can either kill a child or make the vaginal delivery by forceps so traumatizing that its chance of survival is greatly jeopardized. The mortality of breech presentation can be reduced by judicious use of operative delivery rather than breech extraction through a pelvis that is too small to accommodate the particular infant.

Inertia according to the text books of obstetrics may be either primary or secondary. It is primary when the labor never does become well established, and secondary when, after a period of good labor, there is a diminution usually because of some degree of fetopelvic disproportion. The same judgment must be used in handling inertia as is necessary in handling dystocia. We have found that the judicious use of intravenous pitocin will very frequently allow satisfactory resumption of labor with eventual good outcome.

General Disease

For many years women diabetics simply didn't get pregnant. Their disease was too severe, and they were considered infertile. With the advent of careful use of insulin many individuals are now becoming pregnant, but they still pose a difficult problem both for the internist and the obstetrician. The diabetes becomes less controllable during pregnancy. Patients with diabetes are also much more prone to develop toxemia and polyhydramnios. In the presence of these the fetal outlook is poor. We have frankly swung back and forth between treatment by early delivery, even though it might require cesarean section and allowing the patient to go to normal termination of labor with spontaneous delivery. At the present time in spite of glowing reports by both means of treatment we have yet to have a clear idea of our own experience in this regard. We do think that it is better to accomplish delivery in diabetic women somewhat earlier than if they did not have the disease. The exact timing, however, is uncertain and we are not sure whether it should be done by surpabubic delivery or by induction of labor.

It is well known that pregnant women are prone to develop anemia particularly the

iron deficient variety, and one should not be lured into the trap of being assured of satisfactory blood counts because an initial hemoglobin early in pregnancy is within normal limits. While we do not think that every pregnant woman should be provided with a whole group of vitamin-iron-calcium pills except on indication, the hemoglobin should be checked several times during the pregnancy to insure a satisfactory level so that the fetus will not be deprived of essential blood building elements.

While as with any other statement in medicine there are exceptions, it is our opinion that any surgical disease should be treated surgically without regard to the pregnancy. Occasionally such surgical treatment of disease such as appendicitis may, because of the toxicity of the initial disease, cause premature labor sometimes too early for fetal survival.

TABLE V
METHOD OF DELIVERY, STILLBIRTHS

Spontaneous Vertex	60.8%
Spontaneous Breech	17.5%
Low Forceps	2.8%
Breech Extraction	3.5%
Cesarean Section	4.2%

Table V shows the method of delivery in a series of stillborn infants. It may be noted that at the Margaret Hague Maternity Hospital forceps are not a routine procedure for delivery principally because of the difficulty of control in a unit with over 300 individuals delivering babies. These figures are reasonably equivalent to the figures for the same types of delivery in the whole hospital population. We think that there is not a great deal of fetal loss because of the method of delivery. In general fetal loss occurs from the other factors which have been discussed.

TABLE VI
TIME OF DEATH, STILLBIRTH

Premature, Antepartum	53.6%
Premature, Intrapartum	9.6%
<hr/>	
Total Premature	63.2%
Term Antepartum	23.6%
Term Intrapartum	13.2%
<hr/>	
Total Term	36.8%

Table VI shows the time of death in the infants that were stillborn. It will be noted that over half of them occurred prior to labor in premature infants, and almost another quarter also occur antepartum in term infants, and that the total number that are lost intrapartum while the patients are in labor is a little over 22 percent. Most of this latter group include the hemorrhagic emergencies and some of the toxemias and a good many of the infants that died because of cord complications.

TABLE VII
CAUSE OF DEATH, STILLBIRTHS

Abruption of Placenta	20.7%
Cord Complications	13.2%
Fetal Anomalies	10.4%
Toxemia (All)	9.0%
Unknown	46.7%

Table VII indicates the causes of death as well as we could determine them. Abruption is by far the largest single group. Defects in the cord usually indicating true knots or multiple tight turns around the neck is next and prolapsed cords third. The fetal anomalies account for ten percent. It indicates that at least that number of our stillborn infants had no opportunity to live at all. In this particular group of categories the unknown group is over 46½ percent. We would be a good deal less than honest if we implied that all of these causes of death are determined by autopsy which certainly isn't true, but even those that do come to autopsy show far too high a number in which the pathologist is simply unable to find any specific cause. It is certainly not a cause of death to say a stillborn baby has atelectasis or any of the other more usual findings in such infants.

TABLE VIII
NEONATAL DEATHS, TIME OF BIRTH

Previa	30%
Premature	40%
Term	30%

Table VIII indicates the birth status of the babies that were born alive but did not survive. It will be noted that 70 percent of these never accomplished full term. A vigorous attempt to reduce the factors that

cause prematurity would certainly reduce this figure a great deal. Those that die after a term birth are often associated with severe maternal complications.

TABLE IX

CAUSES OF DEATH, NEONATAL PRE TERM

Congenital Anomalies
Tentorial Tears
Other Brain Hemorrhage
(Atelectasis)
(Hyalin Membrane Disease)

Table IX shows the causes of death in pre-matures that died after being born alive. There is nothing particularly striking in this group of diagnoses, and except for the congenital anomalies we think that most of these infants could have survived if they had been brought to term.

Table X, the last, indicates the causes of death in term infants that were born alive and died after birth. Once these infants are born their survival depends upon keen and accurate diagnosis. This is particularly true of the obstruction of the bronchial and intestinal tracts for we have had good success with surgical relief of such obstructions provided they are recognized before the infant is in a condition that is too critical to sustain the necessary surgical repairs. The percent-

age incidence has not been shown in the last two tables because there is considerable fluctuation from year to year percentage-wise, and there are many other causes that were not seen in the few years considered.

TABLE X

CAUSES OF DEATH, TERM INFANTS

Congenital Anomalies
Atelectasis
Pneumonia
Bronchial Obstruction
Congenital Heart Disease
Intestinal Obstruction
(Meconium Ileus)
Cerebral Hemorrhage
Adrenal Hemorrhage
Pulmonary Hemorrhage
Erythroblastosis
Other Blood Dyscrasias
Unknown

Conclusion

The principal purpose of this discussion has been to bring to the attention of those practitioners delivering babies a few of the more common enemies they fight in their attempts to lower perinatal morbidity and mortality. If an alertness to these conditions, generated by this paper, saves an occasional infant that might have otherwise succumbed, the effort will have been worthwhile.

Fourth in a Series

STOP RHEUMATIC FEVER

Getting the Patient to the Doctor

STEWART WOLF, M.D.

Perhaps the physicians of our state have not been as impressed as they might have been with the menace of rheumatic fever. If so, they share this failing with physicians all over the country because, although rheumatic fever is a reportable disease in most states, more children die of rheumatic fever each year than are reported. Comparing the figures to those of poliomyelitis it is evident that doctors as well as the lay public are most impressed by crippled legs than crippled hearts. Perhaps we have not been as assiduous in tracking down the streptococcus in the throats of our patients and our patients' families as we might have been.

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This is the fourth in a series of articles prepared for The Journal under the auspices of the Oklahoma State Heart Association and its Committee on Professional Education, emphasizing the theme of the Association for the current year.

The profession and the public alike have played up the importance of cancer

detection, although our preventive measures in cancer cannot compare to those of rheumatic fever. Moreover, detection in rheumatic fever is simpler. The most important tool is the blood agar culture plate on which to grow streptococci from the throat. In most places facilities are available in Public Health laboratories to process the cultures without cost to the patient.

Although it requires special vigilance on the part of the medical profession to STOP RHEUMATIC FEVER, more fundamental is the need for the patient to *reach* the doctor. One of the chief problems is the tremendous number of upper respiratory infections which occur every year. The "Family Study" of Dingle, Rammelkamp, et al., in Cleveland showed that respiratory infections are the most common afflictions of humans. The vast majority are probably of viral origin and only about 10 percent are attributable to the beta-hemolytic streptococcus. For these reasons it has become customary for patients to treat their own upper respiratory infections with proprietary preparations, and often the doctor never sees them. No amount of vigilance on the part of the physician will correct this situation.

How to bring the patient to the physician? There is no sure answer to this problem but a good deal could be contributed if we as physicians recall that the word *Doctor* literally means *Teacher*. Many of us, wholly occupied in fighting disease, take too little time for our part in prevention of disease, especially as it is achieved through an informed public. The problem of how to inform the public is a delicate one, and one which has yet to be solved. Certainly the hysteria which has resulted from announcements about Asiatic Flu is not the right way. On the other hand, the doctor often has opportunities to talk to civic clubs and parent-teachers groups, church groups, etc., and such occasions offer a chance to discuss quietly and seriously the problems posed by

beta-hemolytic streptococcal infection and the hazards of rheumatic fever. Individual contacts with patients and their families can often be turned to educational advantage if the doctor is thinking in terms of his role as a teacher. The aim is for patients to realize that a small percentage of upper respiratory infections are due to a beta-hemolytic streptococcus, especially those characterized by sore throat. It is important for patients with sore throats, especially children, to check in with their doctors in order to have a throat culture made. It is important that our patients and their families realize that the key to preventing rheumatic fever lies in nipping a streptococcal infection in the bud. This may be done by giving a full course of penicillin to every patient with a sore throat. This might be less costly in some instances and less complicated than getting a throat culture, but the disadvantage of using penicillin in all such respiratory infections is the hazard of penicillin sensitization, which is becoming increasingly common and dangerous. If the physician can educate his patients to rely on the results of cultures to determine the therapy needed rather than request "a shot of penicillin" for every head cold he will have made a very important advance toward the rational and safe therapy of upper respiratory infections as well as toward the eradication of rheumatic fever.

It should be remembered that even the shrewdest physician cannot tell on clinical grounds in most instances whether or not a given sore throat is due to the streptococcus. Therefore education of the patient toward the acceptance of the need for cultures is important. At the same time, appropriate committees of physicians need to simplify problems of distribution of culture media and the transportation of cultures to the laboratory so as to expedite the examination and eliminate delay through this and his educational efforts in the community we may yet STOP RHEUMATIC FEVER.

DIAGNOSTIC *Features and Differential* DIAGNOSIS*

MARION K. LEDBETTER, M.D., JOSEPH R. LATSON, M.D.,
and DAN G. McNAMARA, M.D.

Patent ductus arteriosus in its classical form can be recognized clinically in most cases by the typical continuous murmur at the pulmonary valve area, the variable degree of left ventricular hypertrophy, the wide pulse pressure and the usual absence of symptoms. However, an erroneous diagnosis of patent ductus is frequently made in instances in which there is a murmur similar to that of the ductus. This paper deals with the diagnostic features of the patent ductus and with those conditions or malformations of the heart with which it may be confused.

The typical case of patent ductus arteriosus does not have significant pulmonary hypertension. This form of the malformation is distinguished from the large atypical ductus (usually in excess of 1 cm. in diameter¹) in which pulmonary artery pressure is elevated as a consequence of pulmonary arteriolar resistance to a large shunt of blood from the aorta. When the size of the left to right shunt is large as in the atypical ductus, pulmonary arteriolar resistance may not fall significantly with expansion of the lungs at birth, or at any time thereafter. Thus a pressure gradient between the aorta and pulmonary artery occurs only during systole and a diastolic component of the murmur may never develop. This represents the malignant form of ductus arteriosus, the differential diagnosis of which may require cardiac catheterization, and sometimes retrograde aortography or venous angiocardiography.

The pathogenesis of the murmur of the ductus is interesting. During fetal life the ductus arteriosus is a functional vascular channel as the lungs are unexpanded and the resistance in the pulmonary arteries is high². Blood entering the pulmonary artery is diverted into the descending aorta through the ductus. With expansion of the lungs at birth there is a fall in pulmonary resistance and blood is no longer diverted into the aorta. Should the ductus remain patent there is a

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reversal of flow from the aorta to the pulmonary artery. With the normally occurring rise in systemic resistance and the continued fall of pulmonary artery resistance, a murmur with late systolic accentuation extends into diastole to produce a diamond shape on the phonocardiogram. The murmur occurs at the peak of the aortic pulse with maximal intensity at about the time of the second heart sound and when the largest volume of blood is shunted through the ductus. (Fig. 1 and 2) Though sometimes noncontinuous, it may nevertheless be considered a murmur typical of the patent ductus in early infancy³. The typical continuous machinery murmur of the patent ductus is heard when systemic resistance is elevated sufficiently above pulmonary resistance to result in a significant

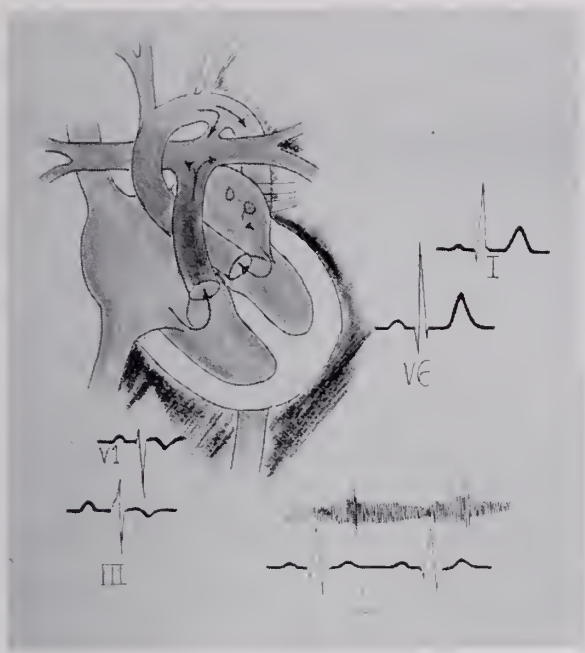


Fig. 1. This diagram depicts the anatomical location of the patent ductus arteriosus opposite the left subclavian artery. It indicates the manner in which there is an increase in blood flow to the pulmonary artery and lungs with consequent overloading of the left ventricle, as indicated by signs of left ventricular hypertrophy on the ECG. The phonocardiogram reveals the continuous murmur with the peak of the diamond at the second sound.

pressure difference in the aorta and pulmonary artery throughout the cardiac cycle. The shunt is only left to right with arterialized blood entering the pulmonary artery and there is thus no peripheral arterial unsaturation.

The roentgenographic appearance of the typical ductus may be that of a normal heart with normal pulmonary vascular shadows in the PA projection. (Fig. 3) Bruwer⁴ has shown that cardiac enlargement and increase in pulmonary vascular markings are related to the size of the left to right shunt and parallel closely the development of pulmonary hypertension. Left atrial enlargement and prominence of the main pulmonary artery segment are the first chamber abnormalities to occur. Figure 4 is the PA view of a five year old girl with a large atypical ductus.

Cabrera⁵ in 1952 described characteristic electrocardiographic changes of hypertrophy

in terms of whether the strain or overloading of the ventricles occurs during systole or during diastole. In the patent ductus, or in any malformation involving a significant left to right shunt distal to the right atrium, there is an increase in return of blood from the lungs to the left side of the heart during diastole and consequently, diastolic overloading of the left ventricle. In this instance, one may see flattening of the ST segment with tall peaked and symmetrical T waves in leads II, III, VF, and the left precordium. There may be in addition deep S waves in the right precordial leads and increased depth of Q waves with tall R waves over the left precordium. (Fig. 2) This pattern represents changes of mild left ventricular hypertrophy. The degree of left ventricular hypertrophy depends upon the size of the ductus. There may be very minimal or no evidence of left ventricular hypertrophy in the small ductus, or pronounced left ventricular hypertrophy in the large ductus. The development of right ventricular hypertrophy parallels the degree of pulmonary hypertension which may occur, and is dependent on increased resistance to right ventricular outflow during systole. Figure 5 demonstrates electrocardiographic findings in the presence of a large left to right shunt. Right ventricular hypertrophy is shown by tall R waves, in the case of (b) the ventricular septal defect by RR', and by deeply inverted and peaked T waves over the right precordium.

Retrograde aortography has been described by Kieth⁶ as a relatively safe procedure for infants when the diagnosis of patent ductus is suspected but clinical findings are not classical. In our clinic a dose of 1 c.mm. for each kg. of body weight of 30 percent urokon as a contrast agent is injected into the left subclavian artery and serial films are taken in the left anterior oblique view. In the presence of a ductus the aortic arch is not visualized and a communication between the aorta and the pulmonary circulation is demonstrated at the level of the left subclavian artery. (Fig. 6)

Cardiac catheterization, when necessary for diagnosis, reveals, in the ductus, a step-up in oxygen saturation in the pulmonary

TYPICAL PATENT DUCTUS

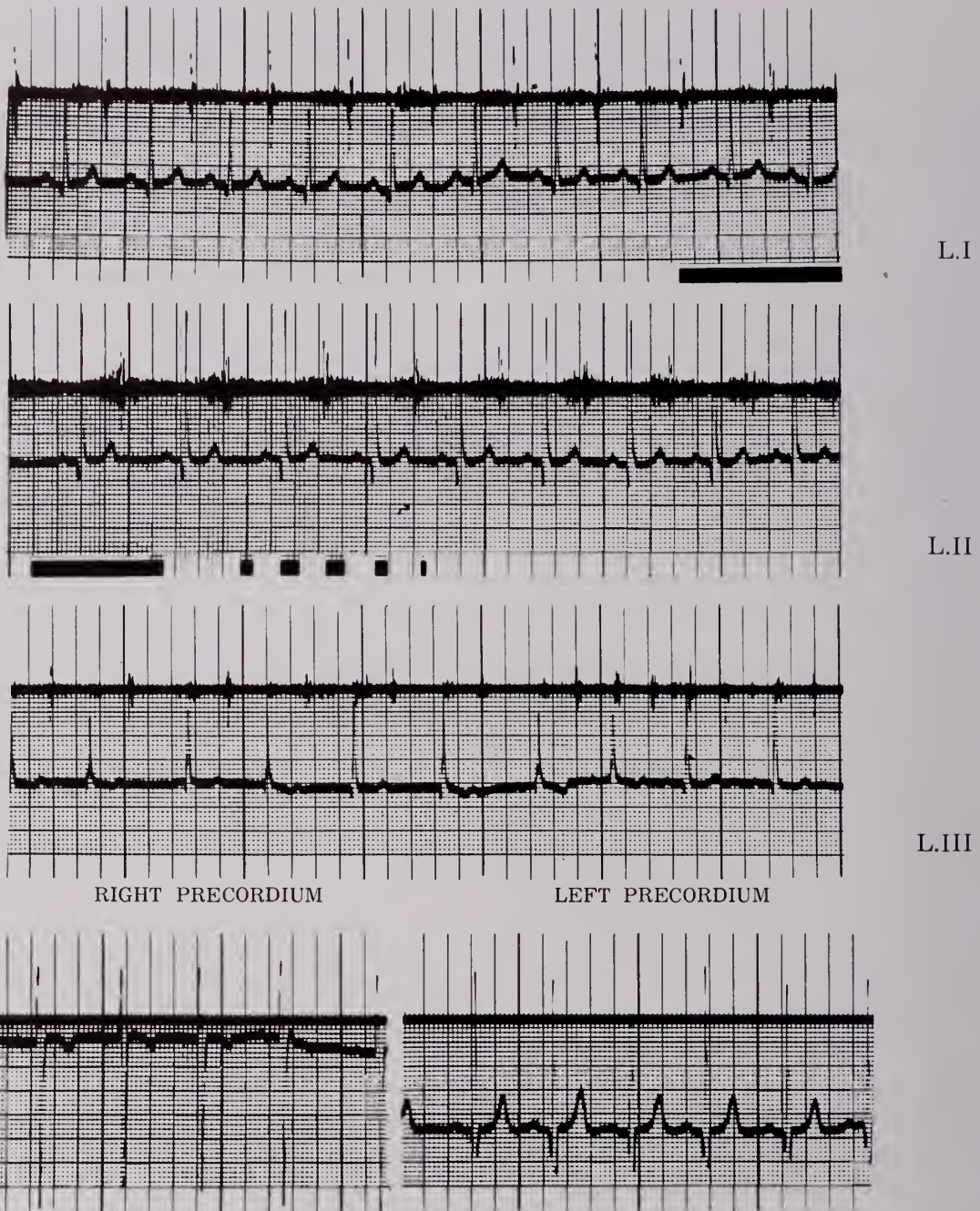


Fig. 2. Electrocardiogram and phonocardiogram of 8 yr. old girl with typical patent ductus. ECG reveals left ventricular hypertrophy as seen at the left precordium by flattened ST segment, peaked T, deep Q and tall R waves. Phonocardiogram reveals sounds recorded from above downward and labeled for ECG, L.I aortic valve area, L.II pulmonic valve area, L.III Fourth interspace at left sternal border.

artery. In the presence of pronounced pulmonary hypertension the step-up is less distinct, and may be demonstrated only when 100 percent oxygen is administered to the patient. This procedure results in lowering pulmonary resistance and increases the left

to right shunt. With pulmonary valve incompetence due to elevated pulmonary pressure a step-up may occur in the right ventricular outflow tract. Catheterization findings of the ductus and other malformations are summarized in table II.

Table I

Differential Diagnosis of Ductus Arteriosus

1. Venous hum
2. Ventricular Septal Defect with Semilunar valve regurgitation
3. Aortic Stenosis and regurgitation
4. Aortic Septal Defect
5. Post-valvular stenosis of Pulmonary artery
6. Truncus arteriosus
 - a. True truncus
 - b. Pseudo truncus
7. Arteriovenous fistula
 - a. Systemic
 - b. Pulmonary (venous-arterial)
 - c. Coronary
8. Aneurysm
 - a. Sinus of Valsalva with rupture
 - b. Aorta with rupture to pulmonary artery

Venous Hum

In childhood there is commonly heard a venous hum at the base of the heart which has frequently led to the erroneous diagnosis of patent ductus. The hum is a continuous murmur and is usually of maximal intensity at the aortic area, but is often equally loud at the pulmonary area. It has a continuous high pitched quality and lacks the late systolic accentuation and decrescendo rumbling quality in diastole of the ductus. Of more help in differentiation, however, is the fact that the hum invariably disappears or diminishes with the patient in the supine position, while the intensity of the ductus murmur is accentuated in this position. The hum is intensified by the extension of the neck and is usually obliterated by flexion of the head on the chest or by compression of the external jugular vein. It is a benign murmur of no significance.⁷

Ventricular Septal Defect

The murmur of this defect is classically systolic, and is of maximal intensity at the fourth interspace at the left sternal border. But because of the wide transmission of murmurs in infants and small children this localization is often not of diagnostic value. A high membranous ventricular septal defect may be associated with an abnormally placed or deformed aortic cusp adjacent to or above the defect.^{1,8,9} Aortic insufficiency may result with consequent systolic and diastolic murmurs which, in infancy, may be difficult to distinguish from the ductus murmur. (Fig.7) There may be similarly a diastolic murmur of

pulmonary incompetence due to dilatation of the pulmonary valve ring in ventricular septal defect with pulmonary hypertension. Phonocardiography is particularly helpful in portraying this high pitched Graham Steell murmur which immediately follows the second heart sound and is decrescendo in quality.¹⁰

In a rare instance the aortic cusp may herniate into the right ventricle through a high ventricular septal defect just below the aortic valve to cause a machinery murmur and signs of severe aortic insufficiency. Danaraj¹¹ described a striking case in a fourteen year old girl who expired several hours following the onset of severe retrosternal pain. At autopsy, the right aortic cusp which was not sclerosed or infected had herniated through a ventricular septal defect of 1 cm. in diameter.

Catheterization in the ventricular septal defect reveals an increase in oxygen saturation in the right ventricle at the inflow or mid level. Pressures in the ventricle and pulmonary artery are less than or equal to that



Fig. 3. Roentgenogram of same patient as Fig. 2 with no increase in cardio-thoracic ratio and no increase in pulmonary vascular markings. The only abnormality is possible slight prominence of the main pulmonary artery segment.

of the aorta, depending on the size of the defect.

Aortic Stenosis and Regurgitation

The murmurs of congenital aortic stenosis and regurgitation may simulate that of the patent ductus. In this condition the systolic murmur decreases in intensity prior to the second heart sound,¹² while the ductus murmur is accentuated at the second sound. Diagnosis may be difficult due to the fact that the murmur of aortic stenosis may in infancy be maximal in intensity at the left sternal border, rather than over the aortic valve area. The electrocardiogram may reveal, as in the ductus, only mild left ventricular hypertrophy.

Aortic Septal Defect

This malformation consists of a defect between the base of the aorta and the pulmonary artery just above the semilunar valves. It results from a partial defect in development of the spiral septum which nor-

mally divides the truncus arteriosus into the two great vessels by the eighth week of intrauterine life.¹³ Since the pulmonary circulation is subjected to the pressure of the aorta there is usually pulmonary hypertension and only a systolic murmur. Thus this defect must ordinarily be differentiated from the large atypical ductus. However, when the defect is small and the murmur may be continuous and of maximal intensity at the third left interspace instead of at the second interspace as in the ductus. Differentiation from the ductus is important because of the necessity of separating the vessels by dissection and suturing of the walls. This technique¹⁴ usually requires hypothermia or probably more satisfactorily, the employment of extracorporeal circulation with cardio-pulmonary bypass.

Catheterization reveals findings similar to those of the ductus. However, the catheter may be made to enter the right subclavian or right common carotid artery through the aorta, a maneuver not possible in the ductus.

Post-Valvular Stenosis of Pulmonary Artery

Stenosis of the trunk or a branch of the pulmonary artery distal to the pulmonary valve has been recently described,^{15,16} and is considered to be a benign malformation. A systolic murmur is usual but sometimes a continuous murmur may be present. Gyllensward¹⁷ reported the case of a thirteen year old girl with a continuous murmur believed to have a ductus. After catheterization and retrograde aortography failed to demonstrate a ductus, selective angiocardiology was performed with the contrast medium injected into the main pulmonary artery. Multiple stenoses in the lobar branches of the pulmonary arteries were demonstrated.

True Truncus Arteriosus

In this malformation a common arterial trunk overlying a ventricular septal defect arises from both ventricles. Large pulmonary arteries arise from this trunk and the lungs are plethoric. Cyanosis due to the right to left shunt is usually minimal. Ear oximetry may reveal peripheral arterial unsaturation of a degree not apparent by inspection. (Fig. 9) Both systolic and diastolic murmurs may

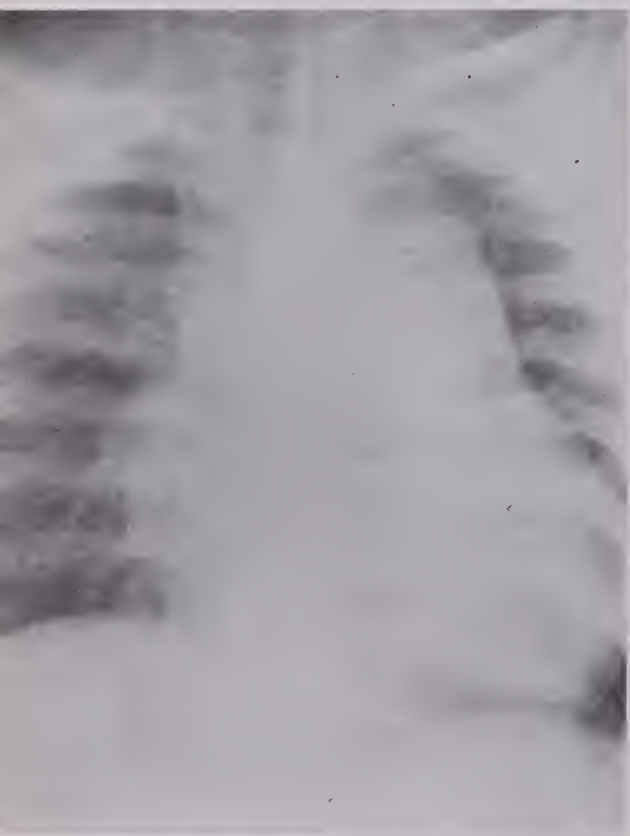


Fig. 4. Roentgenogram of five year old girl with atypical ductus. There is cardiac enlargement, prominence of the main pulmonary artery segment and increase in pulmonary vascular markings.

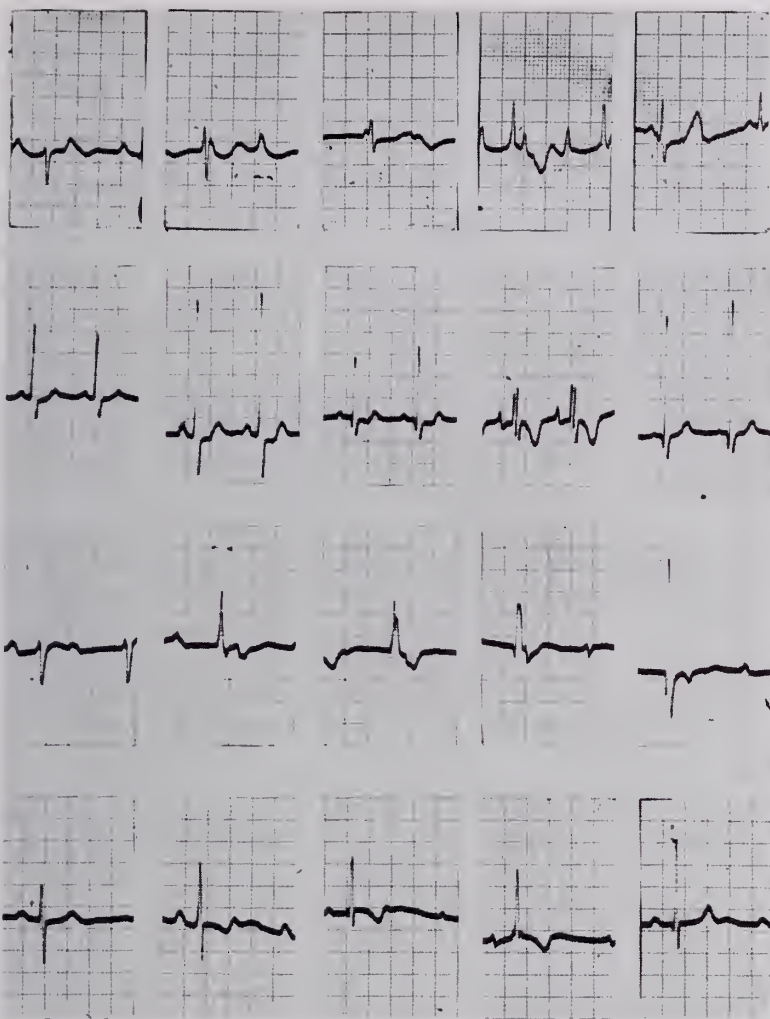


Fig. 5. Electrocardiograms of (a) five year old girl of figure 4, (b) two year old boy with ventricular septal defect, (c) eleven year old boy with true truncus arteriosus, and (d) fourteen year old boy with aortic septal defect. These patients were found by catheterization to have pulmonary artery pressure equal to systemic pressure. All have ECG findings of combined ventricular hypertrophy. (see text) The tracings in (a) and (c) reveal in addition, complete A.V. dissociation.

be audible but are usually noncontinuous. (Fig. 7)

Catheterization reveals a step-up in oxygen saturation in the right ventricle where pressure is found to be equal to that of the aorta. The aorta is huge and the catheter is made to enter the pulmonary arteries with difficulty. Aortography, again in the LAO view, (Fig. 10) outlines the arch of the aorta. The contrast agent enters the pulmonary circulation near the base of the truncus. The aortogram may be very similar in aortic sep-

tal defect. For differentiation from this defect, venous angiocardiology¹⁸ may reveal early filling of the aorta in the truncus, but not in the aortic septal defect.

Pseudo Truncus Arteriosus

This malformation may be considered an atypical type of tetralogy of Fallot in which the pulmonary artery is atretic. It differs from the true truncus in that the pulmonary circulation is supplied by bronchial arteries arising from the truncus. There is a diminished pulmonary blood flow and consequently collateral vascular channels develop to the lungs with systolic or continuous murmurs overlying these channels. (Fig. 7) Unlike the ductus, in this defect there is cyanosis, the degree inversely related to the amount of circulation to the lungs. Roentgenography (Fig. 11) contributes greatly to the diagnosis with findings of a large aorta, pronounced ventricular enlargement with shelving of

the right ventricle, and diminution in pulmonary vascular markings.

Arteriovenous Fistulae

In these defects fusion of venous and arterial septa are incomplete. They may occur in the systemic, pulmonary or coronary circulations and characteristically give a systolic or a continuous murmur with maximal intensity overlying the malformation. Johnson¹⁹ reported a case of a thirty-one year old woman with a fistula of the left subclavian vessels with a thrill and machinery-like murmur over the left upper anterior portion of the chest. Compression by the finger at the medial end of the clavicle caused decrease in the intensity of the thrill and murmur. Diagnosis was established by catheterization which revealed an unusual step-up in oxygen saturation in the left subclavian vein; and by angiocardiology which demonstrated the lesion. Fistulae involving in-

Cardiac Catheterization

Site of O ₂ Step-up		Expected Pressure in PA and RV
Ductus (typical)	PA	Less than aorta
Ductus (atypical)	PA	Less than or = to aorta
Ductus with pulmonary insufficiency	RV outflow	Less than or = to aorta
Ventricular septal defect	RV inflow to mid	Less than or = to aorta
Aortic Septal defect	PA	Less than or = to aorta
True truncus	RV	= to aorta
Coronary fistula	RA or RV	Less than aorta if RA Less than or = to aorta if RV
Sinus of Valsalva	RV	Less than or = to aorta if RV

PA, pulmonary artery; RV, right ventricle; RA, right atrium.

Table II. With a left to right shunt pulmonary pressure may be normal (15-30 mm. mercury) or may be elevated. When the defect is large, pulmonary resistance may approximate systemic resistance, but will not exceed it.

ternal mammary or intercostal vessels²⁰ may similarly imitate a patent ductus.

In pulmonary artery arteriovenous fistula the pulmonary vessels involved in the fistula do not communicate with alveolar capillaries. Venous blood is shunted into the pulmonary veins where it returns unoxygenated to the left atrium resulting in peripheral arterial unsaturation, the degree dependent upon the size of the venous arterial shunt. Bronchial

arteries to the lungs may be involved but do not result in peripheral unsaturation. A continuous murmur may be audible over the fistula if it occurs near the periphery of the lung. Commonly in either pulmonary or bronchial artery fistula roentgenographic and fluoroscopic examination reveals an irregular pulmonary vascular shadow or shadows, sometimes pulsatile.²¹

A fistula involving coronary arteries pro-

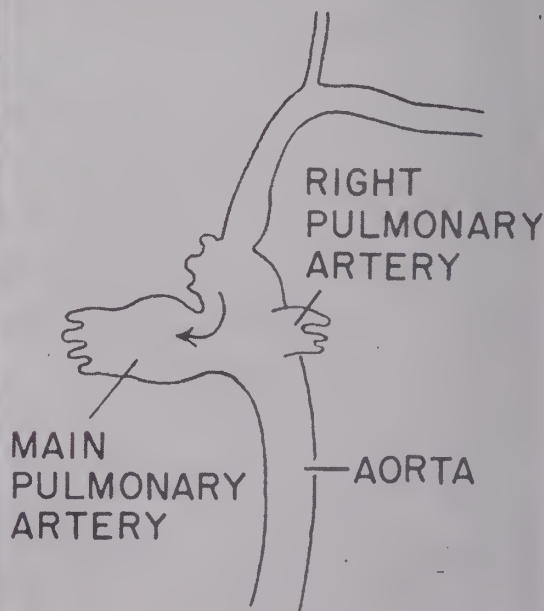


Fig. 6. Retrograde aortogram of a two year old boy who presented only a systolic murmur on examination. Communication with the pulmonary artery through a large ductus is seen opposite the left subclavian artery.

duces a continuous murmur over the precordium and the pulse pressure is widened; when the shunt is large there are signs of aortic insufficiency. The fistula may communicate with coronary veins to empty into the coronary sinus or an aberrant coronary artery may communicate directly with a heart chamber. They are known to increase gradually in size and to necessitate a progressive rise in cardiac output and may lead ultimately to congestive heart failure.²² Catheterization with a large increase in arterial oxygen saturation in the right atrium or right ventricle may be suggestive of the diagnosis. Figure 12 depicts the roentgenographic findings of a twelve year old girl with aneurysmal dilatation of the right coronary artery which emptied directly into the right ventricle. Surgical correction was accomplished by division and ligation of the vessel near the ventricular wall. A similar case was reported by Davis²⁰ in 1956.

Aneurysms

Aneurysm of an aortic sinus (of Valsalva) probably results from a congenital weakness

Fig. 7. Phonocardiograms of the first three patients in Fig. 5. (a) Low pitched systolic murmur followed by the louder diastolic murmur of pulmonary valve incompetence secondary to pulmonary hypertension. (b) Loud systolic, and diastolic murmur of aortic insufficiency—recorded at slow and fast speeds. (c) Systolic murmur followed by diastolic murmur of pulmonary regurgitation. (d) Three year old girl with continuous murmur due to shunting of blood through systemic colateral channels to the lungs.

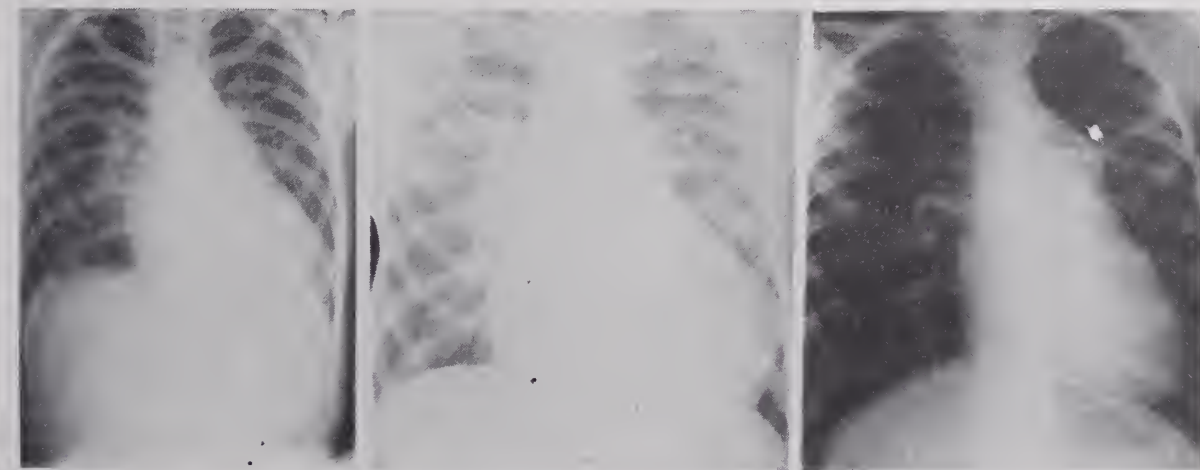
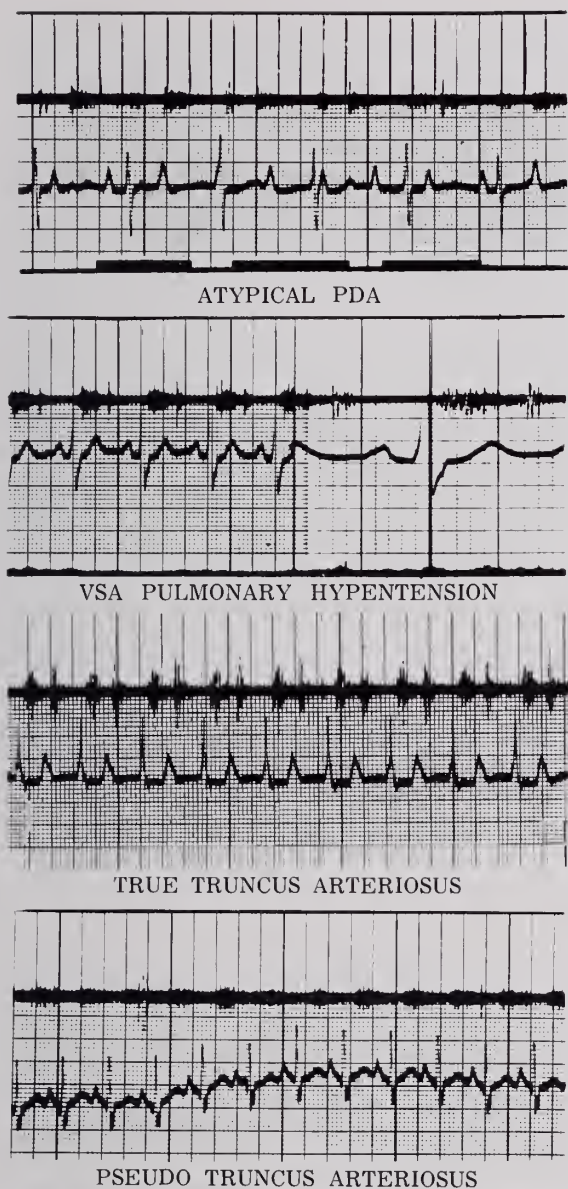


Fig. 8. Roentgenograms of, left to right, five year old girl with ventricular septal defect and aortic insufficiency, true truncus arteriosus (same case as figures 5 and 7) and aortic septal defect (same case as figure 5). Note the similarity of these films to that of the atypical ductus in figure 4. All involve a large left to right shunt.

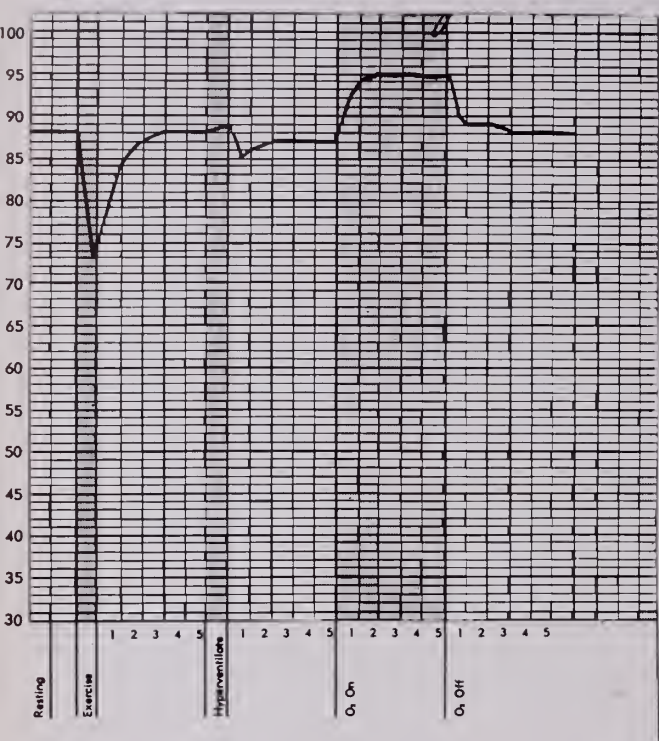


Fig. 9. For oximetry of same child as figures 5, 7, and 8 with true truncus arteriosus to demonstrate subtle degrees of oxygen unsaturation. Resting level of 87% may not have been apparent as cyanosis by physical examination. O₂ saturation fell to 73% on exercise and rose to within the normal range of 95% on breathing 100% O₂.

in the base of the aortic septum where this structure unites in fetal life with the ventricular septum. The right coronary sinus and on a few occasions the posterior or non-coronary sinus is involved,²³ and may rupture into the right ventricle or less often into the right atrium, and rarely to the pulmonary artery. Severe substernal pain simulating coronary occlusion usually occurs. As the rupture of the aneurysm is into the heart and not into the pericardial cavity, the condition is compatible with life for periods varying from weeks to months, and occasionally longer. Signs of aortic insufficiency are seen; and as the rupture commonly occurs near the septal leaflet of the tricuspid valve there is often tricuspid insufficiency with enlargement and pulsations of the liver and distention and pulsation of neck veins. A loud machinery murmur is heard near the chest wall maximal in the third and fourth interspaces. Catheterization reveals an oxygen step-up in the chamber of the heart



Fig. 10. Retrograde aortogram of true truncus arteriosus. The aortic arch is well outlined in contrast to the non-visualized arch of the ductus. (fig.6)

where the rupture occurs. This lesion has been diagnosed antemortem²² and is now amenable to surgery by the direct vision, open heart method.

An aortic aneurysm²⁴ of luetic origin may rupture into the pulmonary artery to produce a machinery murmur and must be included in the differential diagnosis of the adult who presents this sign. Donnell²⁵ reported a case in which right axis deviation and right ventricular hypertrophy indicative of pressure on the pulmonary artery aided in diagnosis.

Summary

The patient with the typical patent ductus arteriosus does not usually offer difficulty in diagnosis. Classical findings by physical examination, electrocardiography and roentgenography are expected. Otherwise one must consider the possible presence of an atypical ductus or one of the malformations which may simulate the ductus. Careful physical examination in the upright and recumbent positions will reveal a venous hum



Fig. 11. Roentgenogram of three year old girl with pseudo truncus arteriosus (phonocardiogram, Fig. 7). Pulmonary vascular markings are scant and there is absence of the main pulmonary artery segment.

saturation is suspected ear oximetry is in-when present. Phonocardiography will be helpful in evaluating the timing and pitch of murmurs. When peripheral arterial unsaturation is suspected ear oximetry is indicated. In the presence of cardiac enlargement, increase in pulmonary vascular mark-

ings, and right ventricular hypertrophy as well as left, pulmonary hypertension may be present, and catheterization or retrograde aortography may be indicated. In our experience venous angiocardigraphy is seldom helpful in the diagnosis of the ductus, but may be helpful in the diagnosis of malformations which involve a right to left shunt, such as the truncus arteriosus.

The patient should be evaluated in regard to cardiac function and if there is no urgency in establishing a diagnosis special procedures may properly be deferred, particularly in the infant and small child. Function should be assessed on the basis of objective as well as subjective findings, for many children with little symptomatology are found to have serious cardiac disability.

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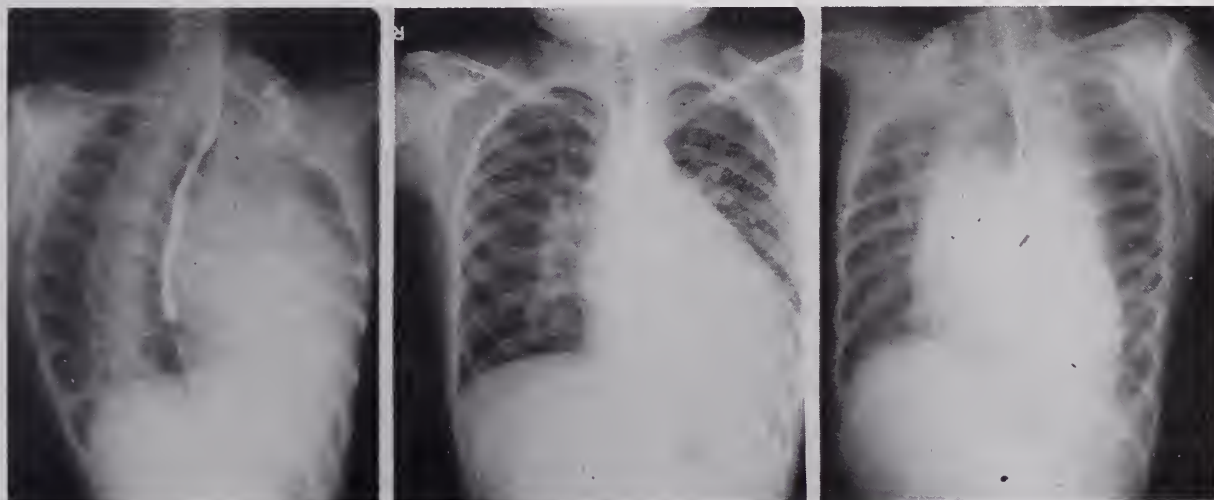


Fig. 5. Roentgenogram of 14 yr. old girl with huge fistula of right coronary artery which communicated directly with the right ventricle. The increasing demands on the left ventricle for cardiac output resulted in marked heart enlargement, particularly of the left ventricle as seen in PA and LOA (left) views.

DUODENAL ASPIRATIONS

VIRGIL RAY FORESTER M.D., WALTER E. HARTFORD, M.D.
and JACK D. WELSH, M.D.

The diagnosis of neoplastic growths involving the duodenum, gallbladder, pancreas, and their ductal systems is at best a discouraging procedure.

Roentgenologic diagnosis of malignancy involving the sphincter of oddi is difficult. To date no radiopaque dye has been found which the pancreas will secrete allowing photography. A neoplastic growth involving the pancreas must be of sufficient size to distort the surrounding structures to be manifest on a roentgenogram. The onset of symptoms of carcinoma of the gallbladder are insidious and diagnosis is rarely made before the disease is extensive. Laboratory tests may be of value and should be done. It is obvious, however, that none of the laboratory tests presently at hand are consistent in their diagnostic value.

It has become a foregone conclusion that if a five year or better cure is to be expected from surgical extirpation of malignant tumors that early diagnosis is necessary. We believe that prolonged medical observation and dependence upon radiologic diagnosis is nearly always fatal even in the best of hands.

The need for a diagnostic method which does not rely on either the size or the duration of the new growth is desirable. Cytological evaluation dealing with the exfoliative cell does not depend upon size for its evaluation. An adenocarcinoma of the common bile duct 2 cm. in diameter found by cytology has been reported.¹

The diagnosis of cancer of the cervix by

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exfoliative cytologic methods has long proven to be useful. Cytologic studies of the sputum in the diagnosis of malignancy involving the bronchi and lung tissue has become an accepted procedure. Cytologic examination of materials taken from the colon and breasts is becoming a more popular diagnostic aid. The cytologic diagnosis of malignant disease involving the duodenum, gallbladder, pancreas and their ductal systems is the youngest of the research projects directed to this method of diagnosis. However, sufficient work has been done to make future studies both interesting and desirable. Dr. Raskin of the University of Chicago in a personal communication makes the following statement. "We have found exfoliative cytologic studies of the pancreas to be very helpful,—and we have found malignant cells in 60% of the cases thus far,

	CASES	NEGATIVE	SUSPICIOUS	POSITIVE
Carcinoma of the Pancreas	12	6	3	3
Cancer of the Ampulla of Vater	4	3	1	0
Cancer of the Gallbladder	2	1	0	1
Cancer of the Hepatic Duct	1	0	1	0
Cancer of the Common Duct	1	0	1	0
Cancer of the Duodenum	1	1	0	0
Non-Malignancy of the Pancreas or Biliary Passage	47	42	4	1

including bile duct and gallbladder tumors. The prior knowledge of a malignancy has helped us surgeons quite a bit. Four times malignancy could not be proved at surgery but on three occasions has proved cytologic method to be a good one in that the tumor of the pancreas or hepatic duct did exist." Seymore reported 68 cases of duodenal and biliary specimens.²

Studies which have been reported to date have been directed solely to the discovery of malignant cells in the aspirated material taken from the duodenum. No effort has been made to locate the source of the cells which are found in the aspirated material. In the latter part of 1955, at the University of Oklahoma Hospitals, a project for the study of exfoliative cytology of duodenal aspiration was instituted. It was thought that an attempt should first be made to isolate the various cellular elements as to their origin. If such a localization could be accomplished it would be quite valuable in the more specific element of diagnosis by these methods.

Because of the anatomical configuration of the second and third portion of the duodenum it can be considered as a reservoir of secretions from the stomach, gallbladder and pancreas. Cells are being continuously desquamated from the mucosal surfaces of these organs and ductal systems. By aspirating these secretions collected in the duodenum, material for exfoliative cytological examination can be obtained.

Method

To facilitate the procedure of collecting duodenal secretions an Einhorn gastro-duodenal tube is used. This is a double lumen tube which has a series of perforations placed so that one series of perforations is located in the stomach and the second series in the duodenum.

1. The Einhorn tube is inserted through the nose or mouth under fluoroscopic guidance to the second portion of the duodenum.

2. Aspiration through the lumen opening into the stomach is continued during the entire collecting period and discarded.

3. The duodenum is then lavaged with

50 cc. of saline which is then aspirated and discarded.

4. Aspiration is then made from the lumen opening into the duodenum for 20 minutes. This is collected into a solution containing equal parts of Ringer's solution and 95% alcohol.

5. One ampule of Secretin*, mixed with 10 cc. saline is injected intravenously.

6. Material is then aspirated for 30 to 45 minutes and collected directly into equal parts of Ringer's solution and 95% alcohol.

7. The tube is then removed.

Cells aspirated in the duodenal fluid tend to disintegrate rapidly. To inhibit this disintegration the material is collected directly into a fixative solution. During the collection period the solution must be in constant agitation for complete mixture. To facilitate a thorough mixing of the aspirated secretions a shaker has been devised. In gross appearance the aspirated material from the duodenum is usually clear, colorless, or a light yellow, containing small amounts of mucus, and, in the absence of stimulation is small in quantity. However, following stimulation with Secretin the quantity usually increases markedly. Secretin, a hormone elaborated by the intestinal mucosa, stimulates a flow of pancreatic juice by direct action on pancreatic secretory cells, to which it is carried by the blood. Inasmuch as the flow of pancreatic juices is neither great nor continuous, stimulation with this hormone will aid in washing out the exfoliated cells from the pancreatic ducts into the duodenum. The flow of bile on the other hand is large in volume and continuous and there is no apparent need for stimulation.

The collected specimen is centrifuged at a minimum speed for about thirty minutes. The supernatant fluid is decanted. Using a pipette or scoop shaped instrument some of the sediment is removed from the bottom of the centrifuge tube and spread on slides that have been coated with a thin layer of Mayer's albumen. Smears are fixed in 95% alcohol-ether for at least one hour. Just before staining the slides are put in celloidin for one minute. This helps the smear to adhere to the slide. The staining pro-

cedure is Papanacilaou's standard technique for staining all smears other than vaginal and cervical ones. It specifies Harris' hematoxylin (six minutes). For the nuclear staining and for the counter stains OG-6 and EA—5 are applied for one and one-half minutes each. After being stained, the smears are mounted on a cover slip using permount for the adherent. Slides are then ready to be studied microscopically.

Tissue cytology depends primarily on the changes in the architectural pattern of cellular morphology. In exfoliative cytology the recognition of malignancy is based on a general criteria which may apply to a great variety of cells, and also on a specific criterion which applies only to characteristic cell types. The architectural morphology of exfoliated cells has for the most part been lost.

The mucosa of the gallbladder, cystic duct, duodenum, and pancreatic ducts are made up of columnar epithelium. To be certain that cells to be studied would be from one of these various location preparations from autopsy material were made of each.

It was also considered desirable that the cells obtained should resemble the cells found in aspirated materials as near as possible. To obtain a truly exfoliated cell the tissue at hand was gently touched with the flat surface of a glass slide which was immediately placed in a fixative solution.

If we compare the columnar epithelial cell exfoliated on a touch preparation from the common bile duct with that of the pancreas we note their close similarity. Also if we compare these touch preparation cells with that of an aspirated cell from the duodenum we again notice that there is a very close similarity in their appearance. Since the predominate cell exfoliated from any one of these areas is columnar epithelial, the location of their site of origin is difficult if not impossible with one exception.

Frequently cells are seen in the aspirated material which are cuboidal in appearance. The epithelium of the gallbladder, cystic

duct, common bile duct, and pancreatic ducts, are all composed of columnar epithelium, however, the cellular elements making up the wall of the bile ducts within the liver are cuboidal epithelium. Sheets of cuboidal appearing cells are seen in aspirated material from the stomach wall. The cells mentioned above have been found in aspirated material as well as on touch preparation of the cystic duct.

Other cellular elements which are noted in the duodenal aspirated material are plasma cells, white blood cells, squamous epithelial cells (which have been exfoliated from the esophagus and passed through the stomach without disintegration) and often sheets of cells which apparently have exfoliated from the stomach mucosa.

We have noted in normal individuals in whom no obvious disease is present in the stomach, duodenum or the adjacent organs that the number of inflammatory cells is usually quite low. In patients, however, who have a malignancy, duodenal ulceration, cholecystitis or inflammatory states the number of inflammatory cells is greatly increased.

Conclusion

Since the desquamations from the various organs and ductal systems under consideration all contain similar columnar epithelium the localization of their source is impossible for most cells, at least at this time. A cuboidal appearing cell which is frequently seen may have its origin in the intrahepatic bile ducts. Increase in the number of inflammatory cells in such disease states as cholecystitis, pancreatitis, duodenal ulceration and cancer may prove to be equally as important as the finding of neoplastic cells themselves.

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*Secretin supplied by Eli Lilly and Company.

This report is from the University of Oklahoma Hospitals, Departments of Medicine and Pathology.

LOW BACK PAIN

L. M. PASCUCCHI, M.D., F.A.C.R.

I do not propose to belabor this most common but poorly defined and misunderstood symptom; my purpose is to demonstrate how the radiologist may aid in its evaluation and solution.

The number of individuals with low-back problems is increasing. This is not surprising in view of the increase in industrial activity and greater participation in athletics. The number and horse power of vehicles on the highway is on the up-grade resulting in more traumatic conditions. The longer life expectancy is productive of more ailments of the organic variety. Hence, from industrial and medico-legal aspects, the radiologist is a key figure in the fair, and just adjudication of the low-back problem. In the management of the geriatric patient, his assistance may be essential.

In the role of a consultant, the radiologist must be aware of the complex etiology of low-back pain. Following is an outline which may prove helpful to him.

TABLE 1

Conditions Which May Result In A Negative or Essentially Negative Radiologic Study:

1. Trauma—strains, hematoma, contusion, concealed (central) disc. Post-lumbar puncture, and post-operative ailments.
2. Organic disease excluding involvement of bones and joints of lumbo-sacral region.
3. Muscular deficiencies (hypokinetic disease).
4. Psychomotor disturbance.
5. Malingering.

TABLE 2

Conditions Which Result in Positive Radiographic Studies

1. Those associated in varying degree with deformities or changes in normal curvature of the spine and which would include 1, 2, and 3, above, and postural defects.
2. Congenital anomalies.
3. Traumatic and post-traumatic.
4. Organic disease including rheumatoid arthritis.
5. Degenerative disease.
6. Post-operative and post-injection (arachnoiditis).

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The radiologist must have available, the pertinent clinical and laboratory data. With this information and the particular tools of his specialty, he becomes first and foremost a clinician and then a radiologist. In rendering an interpretation of his findings, it is imperative that he keep in mind the limitations characteristic of his specialty. In the presence of a negative study by x-ray, the final diagnosis must be reserved for the referring physician who has all the facts. The radiologist, however, should not pass up the opportunity to suggest important leads or areas of further study. As an illustration, consider the entity of Kummel's disease in which a compression fracture of a vertebra occurs in a young individual but which can not be demonstrated by x-ray until some months later. Re-examination should be insisted upon when the course of a traumatic disturbance or disease does not progress as expected. Particularly is this true of the many conditions which may simulate ruptured intervertebral disc.

Those disorders which do not reveal any changes on the radiograph will be discussed briefly. One is concerned here primarily with the postural disturbances due to poor training or muscular deficiency (hypokinetic disease). An examination by x-ray may dem-

onstrate a deformity of the spine (lordosis, kyphosis, scoliosis or kypho-scoliosis).

Strain and stress of tissue due to compensatory mechanism brought into play brings on fatigue and then pain. The stresses may result from postural, occupational or mechanical causes. Any position which will increase lordosis of the lumbar spine will increase strain and hence result in pain. Such positions include standing with hips lightly flexed and knees extended lying prone, lying supine with knees straight and sitting with knees lower than hip level.

The malingerer and the individual with psycho-motor difficulty represent a minor problem for the radiologist. However, he should remember that pain is very real in those patients who have a background of emotional instability and who are subject to tension states. His examination should be conducted in a manner similar in all respects to that of the patient with severe disabling organic disease.

The cause of low back pain in the majority of patients is some degree of lumbosacral strain. Dively, et al.,¹ in a review of 3,587 cases found that 1,603 fell in this group. Sacro-iliac strain and sprain accounted for another 271. Hence, it is obvious that the diagnosis of trauma of the soft tissue (muscles, ligaments, fascia, nerves) is the prerogative of the referring physician.

The incidence of congenital anomalies in lumbar-sacral region is high. Statistics vary, but 15% as given by Baetzer and Waters² may be considered as average. Allen and Linden³ in a pre-employment study of 3,000 individuals found an incidence of 16.35%. The importance attached to these anomalies is attested to by the concern with which they are regarded by industrial organizations. It is safe to say that a pre-employment examination of the lumbosacral spine will obviate many instances of low back pain since an individual can be refused employment or be placed in a type of work which will not result in stress and strain. By the same token, if a disability results, settlement will be possible to the satisfaction of both employer and employee.

Considerable disagreement, however, per-

sists as to the importance attached to these anomalies as a factor in causation of back pain. Statistics are available which support both sides of the question. Willis,⁴ in 1924, thought that split spinous process (spina bifida occulta) predisposed to injury. He cited an incidence of 10% in the roentgenograms of 100 patients with low back pain and only 1.2% in 850 anatomical specimens. Ishmael⁵ found 22.3% congenital anomalies in 1,000 consecutively admitted patients. Dively, et al.,¹ found 1,108 of 1,603 cases of lumbosacral strain associated with typical sciatic pain to be on a mechanical basis due to transitional lumbar vertebra. They added that the resulting strain was transmitted to the superjacent joint space. Gillespie,⁶ Meyerding,⁷ Pollack and Brailsford,⁸ among others, are for the affirmative.

In rebuttal, Bobart⁹ in 1929, thought that developmental anomalies were not a factor in the causation of symptoms in a large series of men examined by him, who were constantly being subjected to severe trauma. More recently, Splithoff,¹⁰ in a controlled study of the lumbosacral junction of 100 patients with, and 100 without low back pain demonstrated no statistical or structural difference. His percentage of incidence of various anomalies coincided well with those of other authors. Southwork and Bersack¹¹ state that asymmetrical posterior (apophyseal) articulations are found in a substantial number of individuals without symptoms of dysfunction; that spina bifida is asymptomatic in the vast majority of individuals; and that there is no increase in lumbar arthritis in both symmetrical and asymmetrical sacralization.

What should the radiologist's position be? Depending upon his own convictions or experience, he can support either side. Perhaps he should refrain from being dogmatic or taking sides and leave the evaluation to the referring physician where it rightfully belongs.

Trauma to the intervertebral disc is a major factor in low back pain. It is interesting that a paper written by Straube¹² in 1923 enumerating 60 odd conditions causing back ache, does not include trauma to the disc. Since then much has been written and

considerable misunderstanding of this entity has occurred.

The diagnosis of disease of the disc is made without the aid of special radiographic procedures in most instances. However, definite indications for myelography and discography exist. Differentiation from neoplasm is occasionally necessary. Myelography is useful in the patient with few or equivocal clinical findings. None the less, the radiologist should be cognizant of the limitations of x-ray. The diagnosis cannot be made on the basis of routine films. With myelography, one must be alert to the presence of needle defects, extravasated dye or fluid, anomalies of the spinal cord and its coverings, ossified disc material, free movement of disc material in canal, spontaneous reduction of protruded disc and multiple herniations. A herniation as high as the D-12 level may give low back symptoms. Of considerable importance is the fact that some lateral herniations may not be demonstrated on myelography, but will be visualized on discography. The radiologist, knowing the clinical data can improve his objective interpretation of lateral disc pathology from 60—65% to 85%. One must remember that a mechanical derangement of the low back region particularly an abnormal cephalad displacement of facets associated with posterior displacement of vertebral body can give rise to symptoms and signs of disease of the disc. A typical disc defect can result from hypertrophy and ossification of posterior ligaments. An entity which must be kept in mind and which may be difficult to differentiate in myelography is that due to swelling and adhesions about nerve roots due to infection or chronic trauma.

Consideration is now given separately to the organic condition of degenerative joint or disc. The onset of osteoarthritis occurs about the age of 35 and, with aging of the population, we may expect to see more of it. It is the result of wear and tear and in many instances, there appears to be no relationship between the degree of involvement, and the severity of the symptoms. The pain when present, is due to trauma, postural stress and pressure on tissues, particularly nerves. The pain may be present in the

sacro-iliac joints, buttocks, lower extremity and coccyx. A sciatic distribution is not unusual. In this category, one may include rheumatoid types of arthritis in which similar factors are involved and which may represent an inflammatory response to stress with production of calcification in tissues.

From the organic standpoint, pathologic processes (other than trauma in arthritis) may be due to infection, granuloma, fungus, neoplasm, and endocrine, metabolic and toxic disturbances. Miscellaneous and rare conditions of the hematopoietic and reticulo-endothelial systems are to be included in the category of noxious disease, one may list the following:

- Post-protactectomy osteitis of spine
- Parasitic infestation
- Aseptic necrosis
- Caisson's disease
- Osteitis condensans ilii
- Paget's disease
- Collagen disease
- Radiation effects

Gastro-intestinal, urologic, gynecologic, ailments may be manifested at some time by low back pain. The possibility of reflex or referred pain from a peritrochanteric bursitis, foot strain and prominent abdomen, with or without pregnancy, is to be kept in mind. Herpes Zoster may start with low back pain and not be recognized until the appearance of the skin lesion.

If the radiologist can demonstrate and, possibly identify, the pathologic entity his role as a consultant has been fulfilled. Needless to say, the qualities of a Sherlock Holmes combining alertness, patience, and persistence, in addition to wide knowledge of medicine, are most helpful.

In summary, the role of the radiologist consists of the following:

1. He demonstrates normal and abnormal anatomy. The latter is an indication of disease of the lumbosacral spine.
2. He aids in evaluating conditions of medico-legal and industrial importance so that an equitable solution for both patient and defendant or employer is possible.

3. He helps eliminate or classify the prospective employee who may later seek compensation for a condition which is prone to aggravation and injury.

4. He aids the referring physician in determining and evaluating:

- a. The extent of disease
- b. The seriousness of the disease — progress.
- c. Effect of treatment of the disease.

5. He helps rule out or confirm presence of trauma to bone and soft tissues. He may give an opinion on the age of the trauma.

6. With respect to disease of the disc his counsel may be valuable in determining whether an operative procedure is indicated. The result of the procedure is demonstrated on an x-ray film.

7. When malingering is suspected, the referring physician may be saved from a serious error in judgment, by the demonstration of the disease by the radiologist.

8. He is a medical consultant and in this respect, he may aid the general practitioner and internist even more than he does the neurosurgeon or orthopedic specialist.

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Establishment of

OKLAHOMA EYE BANK

CHARLES A. ROYER, M.D.

Years of struggle and frustration may soon be ended by the establishment of an Eye Bank in Oklahoma. This dream is being brought to reality by the Lions Clubs of the State of Oklahoma. Through their Foundation for Eye Conservation, Inc., they are raising funds to establish an Eye Bank in Oklahoma similar to the one established about three years ago at the University of Iowa Medical School.

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The project in Iowa was sponsored by the Lions Clubs of the state, and last year two members of their State Committee visited the State convention of Lions Clubs in Okla-

homa to explain how their Eye Bank was established and supported.

An Oklahoma Lion—Bill Parker of Perry—proved to be the sparkplug that initiated the project in Oklahoma. Almost single-handed, he interested his local club and campaigned throughout the state in order to organize the necessary support among the other clubs. Their first problem was the passage of legislation which would enable people to will parts of their bodies for humanitarian or scientific purposes. This measure was passed at the last session of the Legislature. The next step was the formation of a special committee to organize the Bank. Forms had to be printed, supplies purchased, executive personnel engaged, publicity arranged and the various working phases organized and coordinated. Experience has shown that development of any Eye Bank program operating at more than a community level is a major enterprise requiring careful organization and strong financing, with direct supervision by Ophthalmologists familiar with the many phases of corneal surgery. Non-professional supervision involves serious hazards. These final steps are now being completed.

It is planned to establish the Bank in connection with the Medical School where necessary laboratory facilities for the control of sterility are available. The Lions Clubs will finance the central office with a full time secretary to coordinate the functions of the Bank.

Many of the physicians throughout the State will be asked to cooperate with the Bank when donor eyes become available in their community. The local Lions Clubs will provide surgical kits and containers for transportation with full instructions for removing and shipping eyes. This procedure must be done under sterile conditions and it may be necessary to have local physicians, preferably Ophthalmologists, do the actual removing of the eyes.

The value of corneal surgery has been definitely established during the past thirty years. It has enabled the restoration of vision to many eyes which heretofore have been hopelessly blind. A vital factor in the de-

velopment of corneal surgery from a rare operation to an accepted procedure, has been the accumulation of the exact knowledge as to what constitutes usable graft material. It has been established that transplant material must be limited to viable homoplastic or autoplasmic tissue. At the present time, preserved cornea is usable for about 48 to 72 hours, although by certain processes corneal tissue may be preserved for several weeks for use in partial or lamellar grafts. During the early years of corneal surgery, physicians were largely dependent for graft tissue on excised pathological eyes from living patients in which the cornea was clear, but cadaver cornea now constitutes the major source of donor material in centers where this work is being done.

The perishable nature of corneal tissue has led to the formation of Eye Banks where available tissue can be collected, preserved and sent promptly to surgeons in need of it. Legal difficulties have been a great deterrent in the establishment of Eye Banks. In many countries a twenty-four hour waiting period is specified before tissue could be removed from the dead. With corneal tissue, it is essential that it be removed within at least four or five hours. In other countries and states, the right of possession over a dead body was legally vested in the nearest family members and the person himself could not direct that his eyes be used after his death. Remedial legislation in France in 1947, Great Britain in 1952, Spain in 1950, and Alaska in 1953 have enabled the establishment of Eye Banks.

In the United States, the Eye Bank for Sight Restoration, Inc., was established in New York in 1945 and has provided the major center for research and training in this country. About 3,217 eyes have passed through this Eye Bank and others have been distributed through its affiliated branches. Although its facilities have expanded rapidly, the demand still far exceeds the supply.

The establishment of an Eye Bank requires a degree of financial assistance that is not available through teaching institutions and thus becomes a cooperative effort in which the press, voluntary agencies, hos-

pitals and transportation services participate. The launching of the program requires wide publicity through various mass media. Where Eye Banks have been established this cooperation has been excellent, despite occasional sensational or inaccurate reports which arouse false hope among blind and temporarily alienated some professional groups.

The Eye Bank supplies two forms for consent to enucleate cadaver eyes; the first to be signed by the donor expresses his wish to donate his eyes after death; the second, a release to be signed by the nearest family member of the person in charge of funeral arrangements, carries the actual legal authorization for enucleation. A third form, to be signed by person who require enucleations for eye pathology during life, authorizes the Eye Bank to utilize such tissue for corneal surgery. The removal of cadaver eyes by cooperating hospitals has been done free of charge. The eyes are closed immediately after death and the enucleation performed as soon as possible under sterile conditions. The eyes are placed in small sterile glass jars supplied by the Eye Bank. The eye rests upright on gauze squares saturated with sterile normal saline. The history card is completed and attached to the bottle which is refrigerated until called for. Arrangements for transportation are made by the Eye Bank as soon as it is notified that the eyes are available.

Space is provided on the history card for the age and sex of the donor; the cause, the date and time of death; date and time of enucleation; any eye pathology that may be present, serological tests and any significant laboratory findings. When the eye arrives at the Bank, the information is recorded and a culture is made of the fluid in the bottle. The eye is immersed for five minutes in methiolate solution 1:5000 in normal saline,

after which the eye—resting upright on sterile cotton saturated with the same methiolate solution—is refrigerated at 6° Centigrade. An ophthalmologist checks the condition of the cornea and evaluates the information on the history card.

The eye may be classified as suitable for a penetrating graft, usable for lamellar grafting only, unsuited for keratoplasty, or to be used for research. Eyes approved for keratoplasty are sent at once to surgeons who are in need of them. Since the eye culture requires 24 to 48 hours to grow, the bacteriological report is received after the transplantation.

The fact that approximately half of the eyes prove to be contaminated, illustrated the need for professional supervision at the Bank. For example, if the finding of *Bacillus pyocyaneus* is made, the surgeon who used the tissue must be promptly informed. Immediate institution of treatment, on the assumption that infection has occurred, may well save the patient's eye. The organisms most commonly found include *Staphylococcus albus* and *aureus*, *Bacillus subtilis* and diphtheroid bacilli. Less frequently found are streptococci, *Proteus vulgaris* or *Diplococcus pneumoniae*. Clinical experience shows that infection is extremely rare as a complication in corneal surgery, but culture findings may be valuable as an indication for prophylactic therapy.

Since such a program in Oklahoma has seemed rather a hopeless dream for many years, we feel very fortunate that a large group of organized, interested citizens are willing to assume the responsibility of establishing an Eye Bank in Oklahoma. As members of a profession dedicated to the relief of suffering, it is encouraging to find so many good people who wish to join forces with us for the benefit of humanity.

CANCER of the LARYNX

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Management

Principles of Therapy: Carcinoma of the larynx must be treated. Without treatment the death rate, as in all malignant disease, is exactly 100 per cent. There are, however, a number of considerations to be evaluated in determining what form the treatment shall take:

1. The location. This is extremely important but not decisive. As Figi²⁵ states, a review of the literature suggests that carcinoma involving the anterior commissure, the false cord or the ventricle requires laryngectomy. In his own experience, tumors in this location can sometimes be removed by thyrotomy, and in properly selected cases about 80 percent of 5-year cures can be accomplished.

2. The extent of the lesion. This, unhappily, is often a great deal more than is suspected clinically, although, occasionally, it is less than seemed possible on laryngoscopy.

3. Previous treatment in the form of laryngofissure, laryngectomy or irradiation.

4. The general condition of the patient.

5. Age. This is no longer a very sound indication and, in the absence of serious organic disease, should not be regarded as a contraindication to surgery. The increasing longevity of the population makes any other line of thinking illogical. One of the writer's patients was an 80 year old man, who was subjected to laryngofissure. He was up in a chair the day after the operation, was discharged within the week, and is well at the end of two years. Another man, 70 years old, had an equally uncomplicated recovery and remained well for 3½ years. When he died at that time, in an acute asthmatic attack, autopsy revealed no evidence of recurrence. Lam and Gordon²⁶ performed esophagolaryngectomy on a 78-year-old woman who recovered uneventfully. She was left with a tracheostomy, but she re-

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quired no special diet and her whispered voice was clearly audible across the room. In view of her age no attempt was made to teach her esophageal speech.

6. Life expectancy. It is only intelligent to consider this factor seriously, particularly in a patient with other serious organic disease. There should be very sound reasons, however, for refusing surgery to any person merely because, theoretically, he may not live very long.

7. Local complications, such as perforation of the thyroid cartilage or the cricothyroid membrane by the growth. The choice of therapy includes extirpation of the growth by any one of several surgical methods. It should be remembered that no matter what mode of treatment is selected, no therapeutic measure is truly specific; some normal tissue must always be sacrificed along with malignant cells.

Brunner²⁸ who insists that carcinoma *in situ* is not a true carcinoma from the therapeutic standpoint, believes that this type of tumor can often be treated by intralaryngeal extirpation, with laryngofissure or laryngectomy performed later if the original extirpation is not successful. He regards laryngectomy for this kind of carcinoma of the larynx as unjustified. Altmann and his associates²¹ believe that irradiation should be seriously considered, especially when the

alternative is laryngectomy, though against this policy of conservatism is the fact that in half of their 29 cases the lesions were more extensive than they had seemed. Miller and Fisher²² probably have the best solution, that a separate tumor registry should be set up to collect experience and determine how best to manage carcinoma of the larynx in situ.

Laryngofissure. Laryngofissure is also an operation to be performed only in carefully selected cases. The chief indication is the small growth, intrinsic in character, located on anterior middle third of the cord, without involvement of the anterior commissure, or extension to opposite cord and without any evidence of impairment of mobility. If a growth has originated on the cord and extended to the subglottic area or the posterior commissure or across the anterior commissure, with fixation of the cord, laryngofissure is contraindicated.

There is now a tendency in some clinics to employ laryngofissure for exploration in all cases in which the growth is not well defined, with the idea of performing laryngectomy by the same approach if the tumor proves too extensive for conservative surgery. Other observers take the position that while exploration by this route is warranted in an occasional borderline case, the surgeon who performs laryngofissure for this purpose should bear in mind that laryngectomy is always more difficult afterward, that incision into the tumor may be disastrous, and that the difficulties of converting a lesser procedure into a greater one may make the best technique for radical surgery impossible.

There is also some tendency to widen the indications for laryngofissure. Thus Jesberg²⁹ advocates that it be performed with cordectomy if the vocal cord is movable; with removal of the underlying laryngeal cartilage if the cord is fixed; and with removal of the anterior portion of the opposite cord in cordal carcinoma approaching the anterior commissure. He does not consider laryngofissure indicated if the tumor has extended beyond the true cord.

Figi³⁰ believes that the field of the operation may be extended by the use of supplementary electrocoagulation and by the sac-

rifice of more of the thyroid cartilage. When the operation is performed by this technique, it often amounts to hemilaryngectomy, though the continuity of the cricoid cartilage is not usually disturbed.

Broyles³¹ has performed 19 laryngofissures by a window technique, with only one recurrence over a limited period. The operation is an extension of the fenestration procedure suggested by Finzi and Harmer for the implantation of radium needles. It is contraindicated if the growth extends beyond the true cord or if there is any fixation of the cord.

Laryngectomy. Not a great deal need be said about laryngectomy. It is indicated in intrinsic growths, when intralaryngeal extirpation or laryngofissure is not possible, and in all extrinsic growths, whether they are primary or represent an extension of intrinsic carcinoma. It is never contraindicated as long as surgery is still feasible and the patient can tolerate the operation.

When laryngectomy is indicated, it must be performed widely. As in every variety of carcinoma, it must be assumed that the growth has extended histologically beyond the boundaries grossly evident, a matter which cannot be determined with real assurance until the excised specimen is examined. Orton¹⁸ believes that the invisible extent of the tumor warrants the routine performance of preepiglottolaryngectomy recommended by Bisi.

Brunschwig and Lindsay,³² who are advocates of radical surgery in all carcinoma, began in 1943 to perform an extensive panlaryngectomy for advanced carcinoma of the larynx or the immediately adjacent portions of the hypopharynx when metastases had not yet extended beyond the cervical lymph nodes. The operation consists of en masse resection of the larynx, the base of the tongue, the upper 3-4 cm. of the trachea below the larynx, the upper portions of each thyroid lobe, the anterior portion of more of the cervical esophagus, and a wide resection of the regional muscle and cervical lymph nodes. If the lymph nodes are adherent to the jugular vein the vein is resection unilaterally. Temporary tracheotomy and gastrostomy are necessary. In the first 12 cases handled by this method, seven

patients were living and well for from one month to four years and one was alive and well at the end of the seventh year. Most of the surgeons who accept the principle of combined laryngectomy and excision of the cervical lymph nodes are far less radical. Clerf⁶ has done dissection of the cervical lymph nodes with laryngectomy as a prophylactic measure in all questionable cases since 1942. He feels that aspiration biopsy or removal of a single node for diagnosis is quite as wrong as leaving possibly involved lymph nodes in situ. He emphasizes that the operation must be radical and must include the sternomastoid muscle, the ribbon muscles and all other regional structures except the common carotid artery and the vagus nerve. The submaxillary gland is resected when epiglottic lesions have invaded the preepiglottic space. He has found the mortality of the combined operation no higher than the mortality of laryngectomy alone.

The principle of the combined operation was not accepted at the Mayo Clinic until 1951.³³ During the next 30 month period the operation was used 13 times, in three instances bilaterally. As Baehrs and his associates³³ emphasize, the utilization of radical procedures is justified only if the employment is tempered by judgement as to the degree of disability which will ensue and only if there is no other path left open to the surgeon who is trying to improve his rates of cure. The degree of cervical involvement, not the size of the initial lesion, must determine the procedure adopted.

Tracheotomy. It was formerly the custom to use tracheotomy freely in surgery of the larynx. The tendency now is to reserve it for emergency needs and as a terminal necessity. It can be performed rapidly in any well organized hospital. Davis²⁰ experience is typical. In 1945 he stated that while tracheotomy had been employed in 34 of his 40 laryngofissures, he had come to regard it as both undesirable and unnecessary. In all 34 of these cases the endotracheal tube was removed before the patient left the operating table and was never replaced.

An interesting consideration in tracheotomy is whether it has any influence on the development of tuberculosis. Rudo and Jones³⁴ think that it does, and that un-

recognized pulmonary tuberculosis may explain some deaths from carcinoma of the larynx which occur outside of the hospital. Tracheotomy was employed in 43 of their 79 patients with cancer, including 29 subjected to laryngectomy. Pulmonary tuberculosis occurred in 10 of these 29 cases, including four cases in which there had been no previous evidence of the disease. All four patients with fresh disease died, sometimes rapidly, as did three of the six who already had the disease, all from the pulmonary infection. These observers found a number of similar reports in the literature. Their theory is that infection, trauma and the influence of the cold, dust-laden air which enters through the tracheotomy can awaken an inactive or primary pulmonary complex in some cases and reactivate or aggravate active disease in others.

Irradiation. That irradiation has a place in the management of carcinoma of the larynx no intelligent observer would deny. Against Cantril and Buschke's³⁵ statement that laryngectomy is unnecessary in at least a third of the cases in which it is performed is the opinion of many experienced observers that the over-all results with irradiation are in no way comparable to those obtained with routine surgery.

Del Regato³⁶ believes that the poor results frequently obtained in carcinoma of the larynx are practically always due to the great shortage of trained radiotherapists and to the over-enthusiastic surgical excesses advocated by "honestly uninformed or youthfully inexperienced" surgeons.

The trial use of radiotherapy in carcinoma of the larynx, with the idea of resorting to surgery later if it does not succeed, is better theory than practice. Tissue changes always occur following irradiation,^{37, 38} and the total operation may be difficult later or actually impossible. Sloughing and hemorrhage are possible complications, operations on devitalized skin fail, and complicated plastic procedures may be necessary. Som³⁹ states that improved irradiation techniques have eliminated most of these difficulties. He has repeatedly performed total laryngectomy after failure of a full course of radiotherapy and has had adequate healing and permanent closure whenever the tumor was resect-

able, though pedicle grafting was necessary in isolated cases of lymph node dissection.

Lenz⁴⁰ is another who takes the position that surgery is possible after irradiation. One of its dangers, in the opinion of most observers is the exquisite sensitivity of the cartilages to X-ray, and the poorer repair which occurs in them than in the bone. If an extensive perichondritis develops, the whole larynx may slough out, exactly as if laryngectomy had been performed surgically. Lenz's concept is that cartilages differ in their resistance has not been lowered by previous diseases, by partial resection or by early irradiation. As long as it is partly movable, he believes that a trial by X-ray therapy is indicated. If it fails, provided that the treatment has been given correctly, laryngectomy may be done without fear of delayed healing after surgery.

When irradiation is used, the Coutard technique is generally preferred. This is a daily dosage of less than the erythema dose, for a maximum of 30 days, with cross firing at different angles. There is general agreement that no data show that any type of radium therapy, supervoltage X-ray or other techniques achieve better results than this basic method.

The fenestration X-ray method described by Harmer¹² in a paper published in 1954 was first used by Ledoux of Brussels in 1924. After the unilateral removal of a small area of cartilage from the larynx, short radium needles were inserted into the growth. The original technique was modified by Fenzi and Harmer, who placed the needles longitudinally outside of the perichondrium over the lesion, thus preventing disturbance of the growth itself and the risk of infection of the wound. Roentgenograms are taken 24 hours after the application of the needles, to be certain that they are in the desired position. In the absence of complications, they are kept in place for a week. If local recurrence takes place, the treatment can be repeated. This method, says Harmer, has not had the publicity that it deserves. He believes that in the hands of a competent surgeon, supported by good radiotherapeutic advice, it is a cheap and effective technique in properly selected cases. This is an unusually balanced presen-

tation, and laryngologic surgeons might take heed to the observation that the few laryngectomies included in the series were always performed too late.

Watson and Lampert,⁴¹ in 1942, published the description of a technique of applying a single dose of X-ray directly to the larynx, through an open wound. The principle is that of the Finzi-Harmer method and the technique is designed to meet the objection to that technique, that the application of the rays is not homogeneous over a wide area. The method was described as suitable only in cases confined to the cord or extending beyond it but not across the midline and not involving the cartilage. The figures reported in 1945 are not easy to follow, but apparently two of the 29 patients operated on died of intercurrent causes and 13 were alive and well at the time of writing, eight for three years or more after treatment. One of the patients had a normal voice and eight had serviceable voices. The authors considered the method worthy of further trial, with physical factors adjusted to produce higher depth doses.

If irradiation is used as a preoperative measure, which is not the usual custom. Cade⁴² warns that the predetermined total dosage must not be exceeded. If regression is not promptly evident, treatment is discontinued. If partial improvement is obtained, a time limit, preferably not more than three weeks in the future, is set, and surgery is instituted without delay at the end of it. This plan, Cade says, implies controlled therapy and does no harm. The harm is done when active disease is concealed under the cloak of delayed response, radiation effects, radionecrosis and perichondritis, and treatment is persisted in anyway. This same observer makes the excellent point that a radiologist should not undertake the treatment of carcinoma of the larynx, even with a laryngoscopist to advise him, unless he is himself trained to carry out indirect laryngoscopy with skill and ease.

Palliative Therapy and Terminal Care

Latella,¹⁰ pointing out that there is no similar report in the literature, made a careful study of 112 fatalities from carcinoma of the larynx in which the cause of death was known. Most death certificates, as he says,

list the cause as carcinoma of the larynx, which, if the airway remains clear, cannot possibly be true. In these 112 cases he found that the precise causes of the fatal outcome were cachexia in 75 cases, broncho-pneumonia in 73, hemorrhage in 21, lung abscess in eight, pulmonary tuberculosis in eight, anemia in six, tracheoesophageal fistula in four, and miscellaneous causes in nine. The figures indicate that more than one cause was operative in many cases.

As Latella stresses, asphyxia due to laryngeal obstruction did not contribute to the fatal outcome in any of these patients. Prophylactic or emergency tracheotomy had been performed in 51 cases, but the rest of the patients evidently maintained an adequate airway to the end. Latella also comments on the fact that only two of these 112 patients died cardiac deaths, although carcinoma of the larynx is chiefly a disease of the fifth and sixth decades. It is interesting that two of the patients died with carcinoma in other parts of the body, one of them with carcinoma of the rectum ten years after surgery for carcinoma of the larynx.

As a part of this study, Latella presents an instructive account of the clinical course in uncontrolled carcinoma of the larynx, outlining, with sympathy and understanding, what can be done to mitigate the lot of the usually forgotten man, the patient with hopeless or terminal carcinoma. So much can be done, beginning with tracheotomy as soon as there is an indication for it, that it is unfortunate more attention is not paid to this matter. The secret of management, as Latella emphasizes, is long-range planning. The prognosis is poor, but that does not relieve the physician of the responsibility of keeping the patient comfortable until the end and preferably ambulatory as long as possible, for the sake of his own morale. The physician must never forget that, as Cheever⁴³ wrote in another connection he is "the agent of relief, which ever way relief may come."

Prognosis and Results

There is general agreement that the prognosis in carcinoma of the larynx is hopeful in the neoplasms of the vocal cords and progressively less hopeful in the epiglottis, arytenoid, ventricle, subglottis, pyriform

sinus, and aryepiglottic fold, Harmer,¹² who has carefully studied this aspect of the subject, points out that carcinoma of the tip of the epiglottis is so innocent, at least comparatively, that it can be safely treated by diathermy excision, while carcinoma of the base of the epiglottis is a dangerously malignant lesion, seldom cured even by wide laryngectomy.

The grade of the lesion also has considerable to do with survival, though its importance is modified by the time the patient is seen and the treatment adopted. Lederman,⁴⁴ in a discussion of Davis' remarks at a meeting of the Royal College of Surgeons, stated that carcinomas classified Grade III and Grade IV are biologically inoperable, even if operation is technically feasible. This writer cannot accept that point of view. It would be unfortunate if the theory of biologic predeterminism, however correct it may be in theory, were to dictate the treatment of this disease, as it has already dictated the management of certain other forms of malignant disease.

End Results. Review of the recent literature of carcinoma of the larynx, namely, a collective tabulation of reported results were disappointing.

The objectives had been simple: to determine in each series the total number of cases observed, the methods of treatment, the surgical deaths, the survivals and the range of the survival. It was also hoped to break the total down in the same categories in terms of therapy, that is, intralaryngeal extirpation, laryngofissure, laryngectomy and irradiation.

These objectives could be realized in a few reported series but were totally impossible in most. Holinger⁴⁵ speaks of the diagnostic errors, and the consequent confusion of statistics, introduced by the institution of treatment without histologic confirmation. There are other forms of confusion, including those inherent in errors of addition. One can understand the desire of observers to qualify their results and to be entirely specific on various points, but surely it is not too much to ask that a simple statement of total results in the categories listed should be made in all instances before the breakdown of figures begins. At

the present time this is the exception rather than the rule.

It would also be desirable if in each series specific statements were made concerning the status of patients who die from intercurrent disease. In the older age groups, in which carcinoma chiefly appears, there would be expected to be a certain number of deaths from intercurrent causes. Many such cases represent actual long-term cures of laryngeal malignancy.

Six of the sixteen patients in my series are now dead, but only three died from carcinoma of the larynx. The case history of one of the two has already been related. The other, who underwent hemilaryngectomy by the Myerson technique, had extrinsic disease. Three died of intercurrent causes, entirely free of disease, at the end of 16 years, 12 years, and 3 years, respectively. The ten other patients in the group are well from 1½ to 4 years after operation, too brief a time to make any statement about than except that they are now well.

The Patient with Carcinoma of the Larynx

The patient with carcinoma of the larynx ordinarily requires no more than routine preoperative preparation. Psychologically, he needs a great deal and it is unfortunate that the literature pays so little attention to this matter.

There are a number of changes which occur after laryngectomy and of which the patient should be informed. Some of them are relatively insignificant. Others may require, at least temporarily, a new way of life.

The sense of smell is somewhat impaired.³ Smell by diffusion is still possible, but sniffing is not. This is the loss of a very slight pleasure. The loss of the laryngeal air valve means the loss of thoracic fixation.³ This means that a man can no longer perform heavy manual labor and that a woman in the child bearing age cannot bear down in labor. These are compensable losses.

Since there is no longer a check valve present to prevent the ingress of water, water sports of any sort involve a risk that it is probably best to avoid altogether. McCall and Fisher⁴⁶ emphasize the importance



Figure 1. Intrinsic Keratinizing Squamous cell Carcinoma of the right vocal cord. Patient lived 16 years following Laryngofissure and died from intercurrent disease.



Figure 4. Squamous Cell Carcinoma of the right vocal cord. Patient living and well 6 years following Laryngofissure.

of warning the patient against them by reporting the death by drowning of two laryngectomized men whose fishing boats overturned.

The really important consequence of surgery on the larynx is not any of these things. It is what happens to voice. After laryngofissure it is usually reasonably good.

It is altered, it is true, and it is sometimes roughened, but it is clearly audible. Regeneration of the vocal cord is sometimes extremely satisfactory, or an adventitious cord may develop, so that the larynx seems almost normal. When the cord is partially removed, the arytenoid is fixed by a scar tissue and function is altered, but the patient still has a voice.

The patient who suffers a serious voice loss after laryngofissure can usually be promised some improvement in his lot. If the cord fails to regenerate and a large, empty space is left, it can be compensated for, LeJuene⁴ points out, by resection of the thyroid alae on the affected side, which permits the soft tissue to collapse medially. If the anterior third or anterior half of both cords has been removed, Figi⁴⁷ suggests that the cicatrization, synechia-formation and web-formation which results may be counteracted by skin grafts. LeJeune mentions that McNaught favors division of the synechias intralaryngeally, followed by the insertion and fixation of a properly shaped tantalum plate through a small incision made externally through the thyroid cartilage. The prosthesis is worn for at least 6 weeks. LeJeune thinks that it might be well to make this operation a routine procedure in any case in which the difficulties described might be expected to develop.

After laryngectomy, since there are no longer vocal cords to be set in motion, phonation is lost. Since air does not pass through the molds of speech, the whispered voice is lost, though, as Jackson¹¹ says, the patient can be assured that as long as air goes through the mouth, the achievement of a whispered voice is still possible, and within a year or two, it will become larger though it will not be smooth. The results of training are variable and depend, to a considerable extent, on how intensive preoperative preparation and postoperative care have been. McCall and Fisher⁴⁶ reported that of 99 patients who had some form of preoperative training in belching, 16 per cent had no voice at all and 16 per cent had poor voices, but 68 per cent had good voices, clearly audible over the phone, against 48 per cent in those who had had no preoperative training. Andrews and Kucera,⁴⁸ calling

attention to the variability of the results of voice training after laryngectomy state that in private patients they are generally good while in public charges they are generally poor. They believe that more cooperation between speech and hearing services and departments of bronchoesophagology might improve results, but that the single most important factor is motivation.

The patient who requires surgery on the larynx must be told the facts, as gently and as tactfully as possible but without possibility of misunderstanding, and must then be allowed to make his own decision. His freedom of choice must not be interfered with in any way, particularly if the outlook is not good. The laryngologist may prefer surgery, but in such cases it may be that the patient's chances are just as good with irradiation. The physician must not let emotion color his own views and must do his best to help the patient to make an objective decision.

Orton¹⁸ reports that 79 of 524 patients with carcinoma of the larynx seen in private practice refused surgery though in every instance the disease was operable when the advice was given. Their course, Orton believes, was influenced by the misguided advice of family doctors and friends who were misinformed as to the possibilities of voice training after operation and were also misinformed, it might be added, as to the lethal results of failure to accept therapy. Orton's own position is that any person can talk without a larynx if he makes up his mind to do so. The most successful way of convincing a patient that it can be done is to demonstrate to him, before operation, laryngectomized patients who have learned to talk. Many departments of otolaryngology have groups of such patients organized to do this work. Many laryngectomized patients are able to resume their former occupations. They are living examples of what hard work, and intensive training can accomplish.

Summary

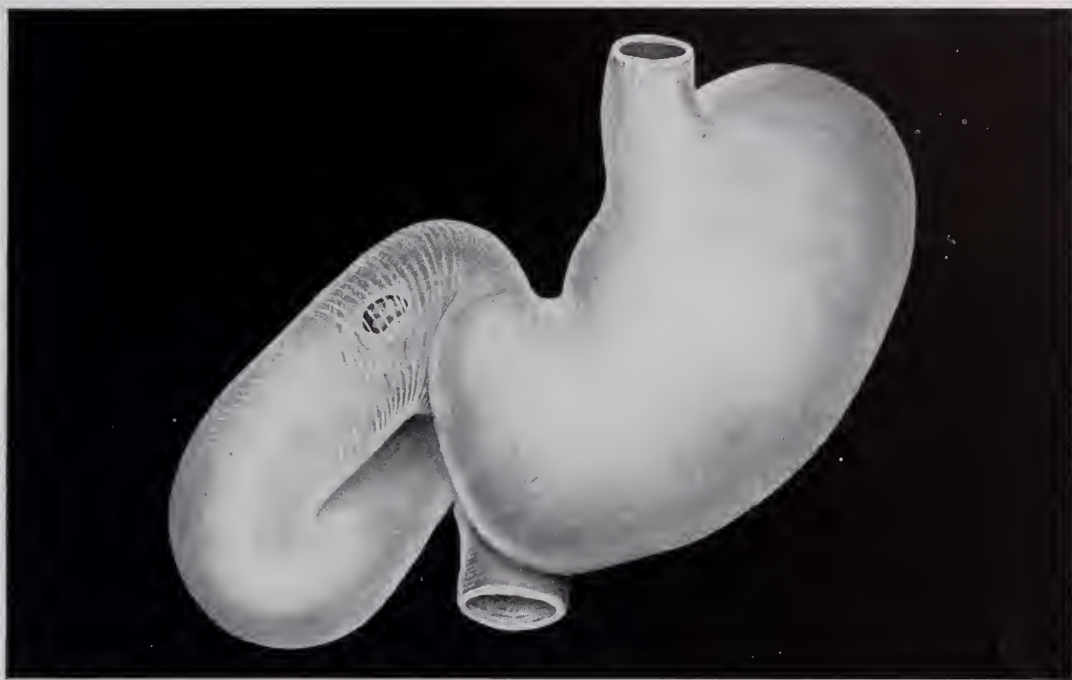
The objective of this presentation has been to describe the essential facts of carcinoma of the larynx in such a way that the physician who is not a specialist in laryngology, encountering a patient with symp-

toms which might indicate the disease, would know how to proceed. If he can perform mirror laryngoscopy, he is justified in making the first examinations. It is his function to advise the patient. Reference of the patient to a specialist does not end his connection with the case. He must know the lethal potentialities of the disease, in order to give the patient the hard facts concerning laryngectomy if that is necessary. He must know the possibilities for survival and functional restoration in order to offer him whatever hope is reasonable and possible. In the hopeless case, he, even more than the laryngologist, must go with the patient to the end.

It is the writer's belief that if the physicians with whom patients are most often in contact had a more detailed knowledge of the essential facts of carcinoma of the larynx, wiser advice would be given to them and the end results of a disease that today, just as in 1890,² can be described as "dire" would be greatly improved.

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SEARLE

PRESIDENT'S LETTER



I would like to take this occasion to make a personal plea to every Doctor in the State of Oklahoma, to make an especial effort to be a better Citizen.

At the time our State is celebrating its fiftieth birthday is an excellent time for us to dedicate ourselves to being one hundred percent citizens and promote the advancement of our State.

Our State is a wonderful monument to the fortitude and stamina of our founding forefathers. They pioneered in the settlement of this frontier country. They created villages, towns, cities and even a state. They set up city, county and state governments which established agencies of law and order, and provided schools and churches. All directed to the general idea of making this our State a place where law abiding Citizens would have equal and free opportunity.

The past few years have seen new and radically different philosophies entering our way of life, which if allowed to continue would destroy our American system.

Thomas Jefferson said, "The Price of Liberty is Eternal Vigilance."

So I urge you as Doctors, become an active Citizen in your Community. Serve on the city councils, the school boards, the boards of tax review, the political party caucuses and lend your assistance to selecting capable men for good government, and above all you and you wife use your franchise and express your desires for a continuation of our way of life. A land with freedom of opportunity for everyone.

John Black Burton, M.D.
President

American Foundation for Allergic Diseases Reports Reaction To Influenza Virus Vaccine

Monovalent influenza virus vaccine, Asian strain, is rapidly being made available in adequate supply. Among the millions of individuals expected to receive this vaccine will be some with varying degrees of sensitivity to the egg protein which is found in this and certain other vaccines prepared from egg-cultured viruses.

It is generally agreed that individuals who in any way indicate that they are allergic to egg-protein should not receive influenza inoculations, since the risk of producing a serious allergic reaction will ordinarily outweigh the risk of serious consequences from an attack of the Asian influenza, which so far has been a relatively mild and self-limited disease in the United States.

The American Foundation for Allergic Diseases is aware that it is common practice for the physician to ask his patient if he has any allergy or sensitivity to egg protein before such vaccines are given. Each vial of the new influenza vaccine contains a reminder on this point. However, because inoculations will be given in great numbers and possibly by nurses and technicians the Foundation is underscoring caution as regards the individual allergic to egg protein. The mass vaccination aspect increases the chance that patients with definite egg-protein sensitivity may present themselves for vaccination, unaware of this allergy, or careless in communicating to the physician that they have previously experienced sensitivity to eggs.

Allergic reactions due to egg hypersensitivity may occur following the injection of virus vaccines in persons of any age, but they are more common and apt to be more severe in young children. The injection of egg protein as a diagnostic procedure in very sensitive children has resulted in severe anaphylactic shock.

Ratner and Untracht found that one out of five allergic children exhibit dermal sensitivity to egg protein and this sensitivity is of clinical significance in about one out of 20 such allergic children. Practical clinical experience indicates that allergic reactions to virus will be encountered in fewer than one out of every several hundred persons receiving the vaccine, when, as is anticipated with the influenza vaccine, millions are inoculated. The majority of egg-protein allergies will be mild. Dangerous reactions are extremely rare.

Much of the difficulty will be avoided as the physician exercises caution in determining egg-sensitivity. Where there is doubt or the physician feels it is important to establish that tolerance exists, the patient may be given an intradermal test with the vaccine itself. This should be performed with a 1:10 dilution, since undiluted vaccine produces a mild local reaction in nearly everyone. If a systemic or a severe local reaction occurs in response to the intradermal test, sensitivity is indicated and the vaccine should not be given. The test itself should, of course, be administered with caution.

A burning sensation at the site of injection and a mild febrile reaction may occur in some individuals receiving the vaccine and should not by themselves, be misinterpreted as signs of an allergic response.

Physicians administering the vaccine will customarily have antidotes for allergic reactions conveniently at hand, and patients suspected of sensitivity may be observed in the office or clinic for half an hour after injection. The physician may wish to prescribe a tablet or capsule of a potent antihistaminic which the patient may take if a delayed reaction should occur.

Asian Flu Vaccine Potency Doubled

Surgeon General Burney of Public Health Service announced recently that it is now possible to double the potency of Asian influenza vaccine, and that the more potent doses will significantly increase not only the degree of immunity but the rapidity with which immunity is achieved. Acting on recommendations of an ad hoc advisory committee to the PHS Division of Biologics Standards, he has asked manufacturers to make the change as soon as possible, but not later than December 1.

Because of more experience with the particular virus strain, and because manufacturing processes have improved since the first vaccine was released in August, it is understood that strengthening of the vaccine will mean little if any delay in production.

The ad hoc committee made the following recommendation to Dr Burney:

"The committee has reviewed the data dealing with serologic responses and protective effects elicited in man by Asian monovalent influenza vaccine having an antigenic potency of 200 CCA units. The recent information, like that obtained earlier, indicates that administration of 1.0 ml. subcutaneously of a vaccine of this potency is of definite value.

"Thus, it is capable of eliciting detectable antibodies in a majority of persons and, presumably, of protecting an appreciable proportion of those vaccinated against the clinical disease.

"However, when 400 CCA vaccine is administered, antibodies develop in more people and to higher level. On the basis of all previous information, this should induce more effective immunity more promptly. Indeed, the antibody levels in such persons are comparable to those in patients who have recovered from Asian influenza.

"Because of the intense efforts of the vaccine manufacturers, production methods and facilities have improved to the point where 400 CCA vaccine might be made available for general use in the near future. Therefore, the Committee recommends the

following: that the antigenic potency of Asian monovalent influenza vaccine be increased from 200 CCA units per ml. to 400 CCA units per ml. as soon as feasible and not later than December 1, 1957."

While calling for an increase in the vaccine's potency, the committee said there is "ample evidence" that the vaccine produced up to now is effective. It gave these reasons:

First, 15 years' experience with flu vaccines of various strains indicate the Asian variety would be effective.

Second, laboratory studies show that subcutaneous administration of one cc of the present vaccine causes a majority of persons to develop antibodies against the disease.

Third, preliminary data from several current studies show that the present vaccine does give protection against actual infection.

Composing the ad hoc committee were the following physicians: Fred M. Davenport, Dorland J. Davis, Thomas Francis, Jr., Alto E. Feller, Maurice R. Hilleman, George K. Hirst, Keith E. Jensen, Gordon Meiklejohn, Roderick Murray, Joseph E. Smadel, and Lt. Col. H. E. Griffin and Navy Capt. John R. Seal.

Obstetrics and Gynecology Board to Hold Examinations

The part 1 Examinations of the American Board of Obstetrics and Gynecology, are to be held in various parts of the United States and Canada, on Thursday, January 2, 1958, at 2:00 p.m.

Candidates notified of their eligibility to participate in Part 1 must submit their case abstracts within thirty days of notification of eligibility. No candidate may take the Written Examination unless the case abstracts have been received in the office of the Secretary.

Current Bulletins outlining present requirements may be obtained by writing to the Secretary's office, Robert L. Faulkner, M.D., American Board of Obstetrics and Gynecology, 2105 Adelbert Road, Cleveland 6, Ohio.

Social Security Footnotes

Prepared by the Public Relations Department of the American Medical Association.

The government, while slow to acknowledge anything wrong with the Social Security System, underestimated the demand for benefits. Women who could obtain benefits at 62, 63, and 64 decided to do so even if the payments were less than they would be at 65. Farmers suddenly turned out to be older than expected. Some began to pay social security taxes on reported income of \$4200 which exceeded their income in prior years. Then they applied for benefits after paying taxes for six quarters. Many people who had retired and were well beyond 65 years of age, dug up jobs for themselves and paid social security taxes for 18 months, thereby qualifying for benefits of from \$30 to \$108.50 monthly for life. Social security experts in making their cost projections underestimated the ingeniousness of the American people when Federal give-aways are as widely advertised as are social security benefits.

* * *

There is not an unlimited number of ways for Social Security to expand. Medical care is one of the few areas not covered by "social insurance," and the present framework of the Social Security Act is adequate to cover socialized medicine by means of a few amendments. The Disability Insurance "Trust" Fund could be changed into a Health Insurance "Trust" Fund by the stroke of a pen. Taxes could be increased. A new title could be added to the law and the private practice of medicine could be virtually destroyed.

* * *

In one way or another, on one excuse or another, social security tax payments are being boosted every year or two instead of at five-year intervals as originally planned. In 1954, the base was raised from \$3600 to \$4200. In 1956, the tax rate was increased. Now, Rep. Kean wants to raise the base rate from \$4200 to \$4800 beginning in 1959. Then in 1960, the tax rate is scheduled to increase $\frac{1}{2}$ per cent for both employee and employer, and $\frac{3}{4}$ per cent for the self-employed. There is no way of knowing just how expensive social security "insurance" is actually going to be.

Social security has been changed many times in the 22 years since the original law was enacted. The size and variety of benefits, the tax rates, the tax base, coverage—all have been radically changed. There is no reason to believe that another 22 years will not see just as radical changes.

* * *

The "soundness" of social security depends on compulsion, high employment, and no wars.

* * *

In the first five months of the 85th Congress, the lawmakers introduced more than a hundred bills designed to broaden the Social Security Program in one way or another. Such open-handed proposals invariably win acclaim, and more tangible rewards at the polls, for their sponsors. But the alarming fact is that years ahead of schedule, the growth of the Old Age & Survivors Insurance Trust Fund has come to an end. At the moment it is paying out more than it is taking in. This unexpected deficit should serve as a red flag to the Treasury, the taxpayer, and all those who are looking forward one day to receiving retirement checks of their own. However generous its motives, even a federal pension fund cannot go on incurring obligations which exceed its resources.

* * *

American medicine would do well to study the plight of physicians in Britain and France before accepting financial arrangements that would make them sitting ducks for capture by Government.

"A dangerous thing about Social Security in the United States," said Ray D. Murphy, president of Equitable Society, "is that the American people have not yet come to realize that more can be given only by taking more. The nation simply does not get something for nothing in Social Security."

* * *

OASI is a system under which the active workers and their employers are contributing the taxes necessary to pay benefits to their fellow citizens on the benefit rolls. The active workers now covered under the system must look for their own old-age benefits, not in any large measure to the Trust Fund, which is only a moderate buffer fund to cover temporary excess of benefit pay-

ments over tax receipts, but mainly to the willingness of the next generation of active workers to pay the increased taxes out of which the retirement benefits will come.

Long term results of the trend toward Big Pensions and its sponsor Big Government are to be feared. Rewards by government for long life to all people begins a leveling or averaging process that destroys individuality and initiative. It encourages the welfare state by placing responsibility for a great portion of our people solely in the hands of government.

Since Bismarck introduced socialized medicine in Germany three quarters of a century ago, the threat of socialized medicine through the extension of so-called social insurance has been ever-present in Western civilization. One nation after another has succumbed to the drive to extend the compulsory system of taxation called social insurance to finance a vast program of medical and hospital care for taxpayers and non-taxpayers. The history of developments in this field in foreign countries should alert the medical profession to the usual consequence of federal social security program.

The late Robert A. Taft classified the Social Security Act as our greatest single step toward socialism.

Every argument which has ever been used to support social security can be used with equal validity to support socialized medicine by changing a few words. If you ask for the one, prepare to get both. It is planned that way.

Those who sponsor social security regard professionals as a source of income and admit that most of them will never claim any benefits. Professional people are to be the source of funds to pay the "benefits" of others.

To support socialistic practices in regard to retirement funds requires that, for the sake of consistency, socialized medicine also be supported. If one believes that the federal government should tax everyone to provide an income for each upon retirement or disability, one must also believe that the same government should, with equal propriety, tax everyone to provide care for all!

How high will the social security tax go?

No one knows. But in South America some countries are paying tax rates as high as 25% of payroll. In France, the tax rate is 35% of much of their payroll and is one of the principle reasons for the failure of the French economy to make a postwar comeback.

Cancer Research Symposium To Be Held in Houston, Texas

The Twelfth Annual Symposium on Fundamental Cancer Research will be held March 6, 7, and 8, 1958 at The University of Texas M.D. Anderson Hospital and Tumor Institute, Houston, Texas.

The topic for the Symposium will be "Radiation Biology and Cancer." The first day will be devoted to papers from the staff at M.D. Anderson Hospital which relate to the general symposium subject. The final two days of the program will consist of papers presented by recognized authorities in radiation research.

Chairmen for the Radiation Biology sessions include: Titus C. Evans, Radiation Research Laboratory, University of Iowa College of Medicine; Jacob Furth, Pathology Department, Children's Cancer Research Foundation, Inc., Boston, and Henry S. Kaplan, Radiology Department, Stanford University Medical School, San Francisco. General chairman of the Symposium is Warren K. Sinclair, chief physicist at The University of Texas M.D. Anderson Hospital and Tumor Institute.

Doctor Rice Memorial Lectures Established by County Society

Action taken at the regular October meeting of the Pottawatomie County Medical Society established the "Doctor E. Eugene Rice Memorial Lectures," it was announced by Clinton Gallaher, M.D., Secretary-Treasurer.

The first series of the annual lectures is scheduled for this fall. The subject for the meetings will be "Electrocardiography."

Doctor Rice died of a heart attack on September 28, 1957, in Shawnee. He was a member of the American College of Surgeons and served on the Editorial Board of *The Journal* of the Oklahoma Medical Association.

A.M.A. Clinical Meeting Scheduled for December

Approximately 4,000 American doctors are expected to attend the American Medical Association's 11th clinical meeting December 3-6 in Philadelphia.

Meetings will be held in Convention Hall and at the Bellevue-Stratford Hotel where the House of Delegates will hold sessions. The meeting has been planned in cooperation with Philadelphia physicians. General Chairman for the meeting is Gilson Colby Engel, M.D. of Philadelphia.

In Convention Hall will be 120 scientific exhibits prepared by physicians and the A.M.A. bureau of exhibits. Among them will be one on medical history, prepared by a group of Philadelphia doctors. There will also be 160 technical exhibits presented by pharmaceutical houses, medical equipment manufacturers, food processors, medical book publishers and other commercial organizations.

Approximately 200 physicians will participate in lecture meetings, symposiums and panel discussions on such subjects as juvenile delinquency, cardiovascular disease, hypertension, diabetes, arthritis, and obstetrical problems.

"M. D. International," a film in the March of Medicine television series, will be previewed for the physicians at 8:30 P.M. Tuesday, December 3, in the ballroom of the Sheraton Hotel. The film, sponsored by Smith, Kline & French Laboratories, Philadelphia, and the A.M.A., will be carried on the National Broadcasting Company network next spring. It deals with American physicians practicing in remote areas of the world.

Another special feature of the meeting will be a trans-Atlantic conference between physicians in Philadelphia and London. The conference on advances in chemotherapy of cancer will be held via telephone Wednesday, December 4.

The General Practitioner of the Year will be named during the meeting. Edward M. Gans, M.D., of Harlowton, Montana was the last recipient of the reward, given annually to an outstanding American doctor for his medical and civic contributions to his community.

An entertainment sidelight of the meeting will be a special concert for registrants by the Westminster Choir of Princeton University, Princeton, New Jersey.

Ninth Postgraduate Course Offered At Kansas Medical Center

The Ninth Annual Postgraduate Course in Medical Technology will be offered at the University of Kansas Medical Center, Kansas City, Kansas, on January 6, 7, and 8, 1958.

Instructors for the course include George E. Cartwright, M.D., Associate professor of Medicine, University of Utah College of Medicine, Salt Lake City, Utah; Bradley E. Copeland, M.D., Instructor in Pathology, Harvard Medical School, Senior Scientist, Cancer Research Institute, Boston, Massachusetts; and Robert D. Wise, M.D., Ph. D., Associate Professor of Medicine and Director, Division of Infectious Diseases, Jefferson Medical College of Philadelphia, Pennsylvania.

Subjects of current interest in microbiology are presented January 6; hematology is discussed on January 7; and the January 8 program covers clinical laboratory medicine and a chemistry symposium. Special emphasis has been placed on the Demonstration Workshops.

The course is open to all who serve in medical laboratories. Enrollment fee for the three days is \$12.00. Program announcement may be obtained by writing to the Department of Postgraduate Medicine, University of Kansas School of Medicine, Kansas City 12, Kansas.

Paralytic Polio Down 80%; Vaccination Campaign Pushed

Because he feels that Salk vaccine has dramatically demonstrated its effectiveness. Secretary Folsom is urging that renewed efforts be put into the nationwide drive for vaccinations. Early this year the American Medical Association initiated the campaign, which has the support of the State and Territorial Health Officers, the Advertising Council and the National Foundation for Infantile Paralysis, as well as U. S. Public Health Service.

Summarizing progress in the last two years, the Secretary said the incidence of paralytic polio had decreased a spectacular 80 per cent, due largely to use of the vaccine. He cited these statistics: 1,578 paralytic cases so far this year, contrasted with 7,886 for the comparable period two years ago and 5,241 last year. Total cases (non-paralytic included) also have decreased, from an average of 24, 928 over the past five years to 4,851 this year.

"The means to avert the suffering and anguish caused by polio are at hand," Mr. Folsom said, and "it is possible to give paralytic polio a knockout blow within the next year . . . This is the best time for medical societies, local health departments, schools, industries and individual citizens and physicians to make sure that everyone who needs protection gets it. If unvaccinated persons will start now, they can get the full schedule of three doses before the next polio season begins." He noted that more than 37,000,000 Americans under 40 have received no vaccine, and 44,000,000 have had only one or two doses, adding: "It will be a tragedy if, simply because of public apathy, vaccine which might prevent paralysis or even deaths lies on the shelf unused."

The Secretary recalled that because use of the vaccine had dropped and supplies had piled up in warehouses, production was cut back about a year ago. After A.M.A. started the vaccination campaign early this year, demand rose sharply and by last spring the vaccine again was in short supply and many campaigns were postponed. Now sup-

plies have piled up again, and there is little possibility of their being exhausted.

This summary was given of the vaccine production situation: Since April, 1955, when manufacture was first licensed, more than 215,000,000 cc of vaccine release, more than 84,000,000 of it this year; production now is running at about 12,000,000 cc per month and manufacturers will be asked to maintain or increase this rate if the demand is sufficient. Public Health Service comments: "It now appears possible, for the first time, to have enough vaccine available to give protection to substantially all the population under 40 before the start of next year's season of peak incidence."

Doctor Davis Named To Serve On Chronic Illness Committee

Kieffer D. Davis, M.D., Medical Director, Phillips Petroleum Company, Bartlesville, Oklahoma, was recently appointed to serve on a 13-member committee named to investigate chronic illness and health of the aged and to make recommendations to Public Health Service. The group met in Washington, D. C., on October 17 and 18, 1957.

This is the third organization set up by the Department of Health, Education, and Welfare to look into the problems of the aged. Others are a department committee, taking in all activities of HEW concerned with aging; a PHS committee on aging; and a Center for Research on Aging, located in the National Institutes of Health.

In announcing the new committee, made up of physicians and others interested in the aged, Surgeon General Burney said: "Since 1900, the number of people 45 and over has increased 3 1/2 times. Today, more than 40 million people—approximately 30 percent of the total population—are in this age group. By 1970 their number is expected to increase to 61 million. Moreover 40 percent of the chronically ill in this country are persons 65 years of age and over, of whom there are now 14 million in the United States."

Coming Meetings

HILLCREST MEDICAL CENTER 1653 East 12th St., Tulsa, Okla.

Lectures in Basic Science Given by Faculty Members of the University of Oklahoma School of Medicine.

Nov. 12—Common Spinal Pathways, G. H. Daron, Lecturer.

Nov. 26—Cerebellar Structures and Function, G. H. Daron, Lecturer.

Dec. 10—Autonomics: Structure and Function, G. H. Daron, Lecturer.

Dec. 17—Central Autonomic Function as related to common medical diseases, C. G. Gunn, Lecturer.

Jan. 14—Sympathetic and Parasympathetic Drugs, P. W. Smith, Lecturer.

Jan. 28—Newer Brain Drugs and their Relation to the Hypothalamus, C. G. Gunn, Lecturer.

Feb. 11—New Sedatives: Narcotics and Narcotic Antagonists, A. A. Hellbaum, Lecturer.

Feb. 25—Common Metabolic Pathways, A. T. Bever, Lecturer.

Mar. 11—Anticoagulants, E. G. Larsen, Lecturer.

Mar. 25—Estrogens and androgens, A. T. Bever, Lecturer.

April 9—Adrenal Steroids; Aldosteronism, R. W. Payne, Lecturer.

April 30—Thyroid: Recent Advances in Diagnosis and Treatment, R. W. Payne, Lecturer.

May 13—Pulmonary Function, M. T. Lategola, Lecturer.

May 27—Basic GI Physiology, J. W. H. Smith, Lecturer.

June 10—Physiological Basis of Liver Function Tests, E. G. Larsen, Lecturer.

June 24—Alimentary Reserve: the malabsorption syndrome, J. W. H. Smith, Lecturer.

AMERICAN COLLEGE OF SURGEONS

Sectional Meeting

Statler Hilton Hotel Dallas, Texas

JANUARY 9-11, 1958

Dr. Frank H. Kidd, Jr., and a Committee of Dallas Surgeons have planned a well-balanced program of interest to general surgeons as well as surgical

specialists. Subjects range from Chemopallidectomy for Parkinson's Disease to Bomb Phenomenology.

All members of the medical profession are invited to attend.

Sectional meetings of the American College of Surgeons draw on surgeons of outstanding ability to discuss problems encountered in daily practice, and to disseminate information about new techniques. Sefulness is the keynote to all College programs, which are planned by local committees answering the needs of doctors within the meeting area. Panels, symposia, papers, medical motion pictures, and question and answer periods characterize the meetings.

Two new features are scheduled for each Sectional Meeting this year: a Fellowship Luncheon, at which a panel of College officials will answer questions about the entire program of College activities, and in turn, pose questions to the audience; and a social, rather than scientific, dinner meeting to which program participants, visiting surgeons, wives and other guests are cordially invited for an informal and pleasant evening of entertainment.

Postgraduate Division UNIVERSITY OF OKLAHOMA MEDICAL CENTER SHORT COURSE SERIES

Nov. 13—Surgery—Biliary Tract Disease.

Dec. 11—Medicine—Problems in Pulmonary Diseases.

Jan. 8—Pediatrics—Growth Failure.

Feb. 12—Surgery—Urology Symposium and C. B. Taylor Lectureship.

Mar. 12—Medicine—Pathogenesis and Treatment of Anemia.

April 9—Anesthesiology—Anesthesia for the Part-Time Anesthetist.

May 14—Pediatrics—Pediatric Allergy.

June 11—Surgery—Surgical Diagnosis and Problem Clinic.

The courses are designed so physicians may attend four hours of formal instruction in the above fields while spending only one-half day from their office. This series is approved for credit by the Oklahoma Academy of General Practice.

Time 3:30 to 8:30 p.m. the second Wednesday of each month.

Place: Room 120, Medical School Building.

Registration: \$3.50 per session; \$25 for the entire

series includes dinner, Hospital Cafeteria. Mail registration to office of Postgraduate Instruction, University of Oklahoma Medical Center, Oklahoma City 4, Oklahoma.

BASIC ELECTROCARDIOGRAPHY—

March 3 through 7

This course consists of informal lecture presentations which assume no formal acquaintance with the subject. Laboratory exercises are carried out by the participants with individual help from the instructors. All working materials are furnished. Participants are expected to attend all lectures and laboratory periods and remains the entire time scheduled.

OPHTHALMOLOGY-OTOLARYNGOLOGY

SYMPOSIUM—March 6 and 7

Sponsored by Oklahoma City Society of Ophthalmology and Otolaryngology

Guest Lecturers:

Joseph H. Haas, M.D., Chicago, Illinois

Herman Semonov, M.D., Beverly Hills, California

OBSTETRICAL-GYNECOLOGICAL SYMPOSIUM—

March 8

Sponsored by the Oklahoma City Obstetrical and Gynecological Society. There will be two prominent guest lecturers.

PEDIATRIC SURGERY, RADIOLOGY,

PATHOLOGY—March 14 and 15

Fourth Annual Combined Symposium

Sponsored by Oklahoma Association of Pathologists, Oklahoma Association of Radiologists, Oklahoma Chapter, American College of Surgeons

Guest Lecturer:

Robert E. Gross, M.D., Surgeon
Boston, Mass.

William L. Riker, M.D., Surgeon
Chicago, Ill.

Orvar Swenson, M.D., Surgeon
Boston, Mass.

John W. Hope, M.D., Radiologist
Philadelphia, Pa.

Also a prominent anesthesiologist and pathologist will be obtained for this program.

TRAUMA—April 4 and 5

Sponsored by the Regional Committee on Trauma of the American College of Surgeons

OKLAHOMA ASSOCIATION OF HOUSE STAFF

PHYSICIANS—May 23 or June 6

Two guest lecturers and presentation of original papers by members of the various House Staffs will

highlight this program. Participating hospitals are: Hillcrest Medical Center, Tulsa; St. John's, Tulsa; McBride, Mercy, St. Anthony, University, Veterans Administration and Wesley, Oklahoma City.

CANCER TEACHING DAY

**12th Annual Meeting, Oklahoma Division,
AMERICAN CANCER SOCIETY**

December 7, 1957

Skirvin Hotel, Oklahoma City

Current advances in diagnosis and therapy of cancer will be topics for presentations by four specialists. The annual cancer program is open to all Oklahoma physicians.

Speakers

Alexander Brunschwig, M.D., New York City, Surgeon and Gynecologist, Memorial Hospital for Cancer and Allied Diseases.

John B. Hazard, M.D., Cleveland, Ohio, Pathologist, The Cleveland Clinic.

Joe V. Meigs, M.D., Boston, Massachusetts, Gynecologist, The Massachusetts General Hospital.

J. A. del Regato, M.D., Colorado Springs, Director The Penrose Cancer Hospital.

First Oklahoma Colloquy on

ADVANCES IN MEDICINE

February 6, 7, and 8, 1958

The first Oklahoma Colloquy on Advances in Medicine will be held February 6, 7, and 8, 1958. The meeting will be devoted to problems on Fluid, Electrolyte and Nutritional Balance and is under joint sponsorship of the Department of Medicine, University of Oklahoma, Division of Postgraduate Education, University of Oklahoma and the Baxter Laboratories.

Eight nationally prominent investigators in this field will participate and present the results of original work from their laboratories. Among the guest speakers will be Dr. Curtis Artz, Associate Professor of Surgery, University of Mississippi; Dr. Ronald Cooke, Chairman, Department of Pediatrics, Johns Hopkins School of Medicine; and Dr. J. Russell Elkin-ton, Associate Professor of Medicine, University of Pennsylvania.

Organization News

O.S.M.A. Council Holds Sunday Afternoon Session

The Council of the Oklahoma State Medical Association met Sunday, October 6, 1957, in the Executive Offices in Oklahoma City. President John Flack Burton, M.D., presided over the meeting which convened at 1:30 p.m. and adjourned at 5:30 that afternoon. All Councilor Districts were represented.

Committee Reports

Medical Advisory Committee to the Oklahoma Association for Mental Health. George H. Guthrey, M.D., Chairman of the Medical Advisory Committee to the Oklahoma Association for Mental Health was presented to the Council to explain a proposed program to provide drugs for the treatment of medically indigent, mentally ill patients. The initiation of a program of this type is a current goal of this lay organization which is composed of fifty chapters throughout Oklahoma. Doctor Guthrey explained that the proposed program would be limited to patients discharged from state mental hospitals, patients discharged from state or community psychiatric clinics or psychiatric sections of general hospitals, patients referred by private psychiatrists to local physicians, and patients under the care of qualified psychiatrists. Because of the success of this program would depend to a great degree on the local physicians in each community, Doctor Guthrey asked the Council for its comments and wishes. He further explained that the program had been submitted to the Oklahoma Society of Neurologists and Psychiatrists who had approved it with limitations.

The Council voted that a Committee chosen from the Council should study the program further and make recommendations for action to be taken.

Cavalcade of Health Committee. Don Blair, Associate Executive Secretary, reported for the Cavalcade of Health Committee. Mr. Blair reported that approxi-

mately \$17,000 of the monies from the sale of booths had been spent in conducting the Cavalcade which was attended by an estimated 250,000 persons and that there was a balance of \$4,544.60 to be refunded to exhibitors.

At its last meeting, the Committee discussed the feasibility of asking the contributors, who wished to do so, to give their refund in a joint contribution to the Medical Research Foundation. The committee felt that a joint contribution of the entire sum would enable the medical profession to receive favorable press releases with a reopening of the Cavalcade publicity.

The Council approved Doctor Goodwin's motion of accepting the report, handling the refunds as suggested, and commending the Committee and the Woman's Auxiliary for their efforts in the Cavalcade of Health.

Asian Influenza Committee. J. Floyd Moorman, M.D., O.S.M.A. Physician Advisor to the Public Health Department on Asian influenza reported on the incidence of the Asian influenza in Oklahoma. He said that the vaccine at the present time was in short supply, but that more vaccine is being released as fast as possible. Doctor Moorman stated that thus far, ten million cc's of the vaccine have been released with distribution being carried out on a population basis.

Committee on Medical Care for the Recipients of Public Welfare Assistance. Mark R. Johnson, M.D., newly elected chairman of the Committee on Medical Care for the Recipients of Public Welfare Assistance, reported briefly on the program as it pertained to problems regarding the Crippled Children's Commission Aid to Dependent Children, and the Public Welfare Department. He stated that the Committee had passed the following motion at its meeting on September 29, 1957, as its recommendation to the Council:

This Committee advises Doctor Burton that as a result of the discussion held this date, the Committee is in favor of maintaining the status quo of the Crippled Children's Commission.

The Committee's recommendation was prompted by possible action of the Crippled Children's Commission to relinquish responsibility for certain categories of child care in order that they might be declared an unmet need and thereby qualify as compensable care under the D.P.W. program for aid to Dependent Children.

Following a discussion, the Council voted that the members of the Oklahoma State Medical Association continue to support, on a voluntary basis, the medical program of the Crippled Children's Commission, if there is no alteration in this program of the care of the crippled child by the commission.

Other Actions of Council

The American Association of Physicians and Surgeons' Essay Contest. The Council voted to help sponsor and support with cash prizes the A.A.P.S. Essay Contest.

The A.A.P.S. sponsors the contest, which is open to high school students, as an annual affair with prizes this year amounting to \$2,675.00 to winning students. The judges for the contest consist of one physician, one layman, and one representative from the A.M.A. There are three levels of competition: state, county, and national.

Because of the difficulty in obtaining the cooperation of the schools, it was suggested that a prize be offered to the teacher whose student was a prize winner. The Council voted to appropriate the following cash prizes for state winners: \$100 first prize, \$50 for second place, and \$25 for third prize. An award of \$50 will go to the teacher of the student placing first and \$25 to the teacher whose student wins second prize.

Doctor Moorman was appointed chairman of the committee to work out details of the contest.

Oklahoma Development Council: Dick Graham, Executive Secretary, presented the subject of the Association continuing its participation as a member of the Oklahoma Development Council. It was explained that in past years the Oklahoma Development Council has organized industrial tours to which 60 to 100 business and professional men gave two weeks of their time, at their own expense, and traveled to industrial states in an effort to attract new industry



OSMA COUNCIL IN ACTION—J. Floyd Moorman, M.D., OSMA Physician Advisor to the Public Health Department on Asian influenza reports on the incidence of the Asian influenza in Oklahoma.

to Oklahoma. The Development Council's main goal is to increase Oklahoma's industrial output and growth.

The Council voted to appropriate funds in the amount of \$300 for dues for one year to the O.D.C.

Semi-Centennial Commemorative Issue: The Council, after much consideration, voted to purchase one-quarter page in the Semi-Centennial Commemorative Issue of the *Daily Oklahoman*.

Attendance

Physicians attending the meeting were: John Flack Burton, Oklahoma City; E. C. Mohler, Ponca City; H. M. McClure, Chickasha; A. L. Johnson, El Reno; Wilkie D. Hoover, Tulsa; E. H. Shuller, McAlester; Malcom E. Phelps, El Reno; R. Q. Goodwin, Oklahoma City; J. E. Highland, Miami; Powell E. Fry, Stillwater.

J. W. Murphree, Ponca City; C. M. Hodgson, Kingfisher; Joe L. Duer, Woodward; Ross Deputy, Clinton; C. Riley Strong, El Reno; C. C. Young, Shawnee; E. K. Norfleet, Bristow; Wendell L. Smith and Marshall O. Hart of Tulsa; Francis R. First, Checotah; R. L. Currie, Sallisaw; William T. Gill, Ada; R. R. Hannas, Sentinel; and M. E. Robberson, Wynnewood.

Also attending the meeting were: Dick Graham, Executive Secretary; Don Blair, Associate Executive Secretary; Jack Spears, Executive Secretary of Tulsa County Medical Society; and Mrs. Alma O'Donnell, Executive Secretary of Oklahoma County Medical Society.

Oklahoma City Physician Installed S.M.A. President

W. Kelly West, M.D., of Oklahoma City was installed as President of the Southern Medical Association in ceremonies held during the 51st Annual Meeting of the group in Miami, Florida, November 11-14, 1957. Doctor West is the second Oklahoma physician to hold this office, the first being the late Lewis J. Moorman, M.D., of Oklahoma City who served in 1932.

Other Oklahomans holding offices in the S.M.A. are John H. Lamb, M.D., and Henry H. Turner, M.D., both of Oklahoma City. Doctor Lamb is a member of the Editorial Board and Doctor Turner is a Councilor and serves on the Executive Committee of the Council.

Highlights of Meeting

Highlighting the meeting was the President's Night Annual Dinner-Dance held Wednesday evening, November 13, when election of officers was held and outgoing President J. P. Culpepper, Jr., M.D., of Hattiesburg, Mississippi, addressed the group. The evening was concluded with professional entertainment and dancing.

A President's Luncheon was held in honor of Doctor Culpepper on Monday. Guest speaker for the affair was George F. Lull, M.D., Secretary-General Manager of the American Medical Association, Chicago, Illinois.

Other functions included the Past President's dinner, the Past Councilors' Breakfast, Section luncheons and dinners, a fishing rodeo and golf tournament.

Scientific Program

Included in the Scientific Program for the four-day meeting were a grand rounds type of national scientific television program on Wednesday evening and six additional color television programs which were screened as a part of the regular scientific program. Both scientific and technical exhibits were on display and a scientific assembly composed of twenty Section groups met daily.

Dr. Burton Attends A.M.A. Council On Medical Services Meeting

John Flack Burton, M.D., President of the Oklahoma State Medical Association, attended the A.M.A. Council of Medical Services meeting in Chicago during October.

Doctor Burton also met with the Committee on Indigent Care, of the A.M.A. Council on Medical Services, of which he is chairman. This committee met with representatives of the Public Health, Education, and Welfare Department of the Federal Government in regard to the Public Welfare program.

Accompanying Doctor Burton was Mark R. Johnson, M.D., of Oklahoma City. Doctor Johnson is the newly elected Chairman of the Committee on Medical Care for Recipients of Public Welfare Assistance.

Oklahomans Participate

Ten Oklahoma physicians participated in this year's Section Meetings.

Reading a paper before the Allergy Section was Carroll M. Pounders, M.D., of Oklahoma City. Elias Margo, M.D., also of Oklahoma City, presented a paper to the Section on Orthopedic and Traumatic Surgery. Participating in the Section on Pathology was P. C. Johnson, M.D., W. L. Scaff, M.D., and R. M. Bird, M.D., of Oklahoma City.

Thomas H. Haight, M.D., T. R. Pfundt, Ph.D., William B. Thompson, M.D., all of Oklahoma City, and John F. Hackler, M.D., of Muskogee, participated in the Section on Public Health of which William W. Schottstaedt, M.D., Oklahoma City is Secretary.

Woman's Auxiliary

Several Oklahoma physicians' wives served as officers to the 33rd Annual Meeting of the Woman's Auxiliary to the Southern Medical Association which met simultaneously. Mrs. John C. Perry, Tulsa, was Historian; Mrs. Elias Margo, Oklahoma City was a Councilor; and on the Executive Committee from Oklahoma City was Mrs. Joseph W. Kelso.

THIS MONTH'S COVER

W. Kelly West, M.D., of Oklahoma City was born in Uvalde, Texas, November 11, 1890. He is the son of A. K. West, M.D., pioneer Oklahoma physician.

The recently installed President of Southern Medical Association was graduated from the University of Oklahoma School of Medicine in 1915. Since his graduation, Doctor West has continued to have a strong interest in his alma mater where he is Professor of Orthopedic Surgery.

Doctor West's great interest in the University of Oklahoma School of Medicine stems in part from the strategic role in the founding of the school by his father. Before Oklahoma was a state, Doctor A. K. West, who had given up a career as a Texas rancher to study medicine, bought a building along with five other Oklahoma City physicians and started teaching medical students. This school was a part of the Epworth college which later became the University of Oklahoma School of Medicine.

In addition to his private practice of orthopedic and fracture surgery and to his teaching position with the Medical School, Doctor West also is Chief Consultant in Orthopedic Surgery at the Veterans Administration Hospital.

Doctor West joined the Southern Medical Association in 1920 and has remained a member since that year taking an active part in the Association's activities. He also holds membership in the American Orthopedic Association, the Clinical Orthopedic Society, The American College of Surgeons, the American Railway Surgeons Association, and is a member and medical advisor of the Oklahoma Chapter of the National Foundation for Infantile Paralysis. He is a member of Phi Beta Pi and Alpha Omega Alpha medical fraternities.

Doctor West was married to Miss Miriam McGuffin of Guthrie, Oklahoma, in 1918. Mrs. West shares her husband's enthusiasm for the Southern Medical Association's work having been an active member in the Woman's Auxiliary and serving as its president in 1939.

Life Memberships Presented



WILLIAM C. MILLER, M.D., of Guthrie was presented his Life Certificate in the Oklahoma State Medical Association on September 25, 1957. Presentation was made by C. M. Hodgson, M.D., Councilor for District 3. Reading left to right—C. M. Hodgson, M.D., Kingfisher, Councilor; John E. Souter, M.D., Guthrie, Oklahoma; William C. Miller, M.D., Guthrie, Oklahoma; James S. Petty, M.D., President Logan County Medical Society; Joseph R. Henke, M.D., Guthrie, Oklahoma, Secretary Logan County Medical Society.



A LIFE CERTIFICATE in the Oklahoma State Medical Association was presented to Virgil R. Hamble, M.D. of Enid, on September 25, 1957. Presentation was made by C. M. Hodgson, M.D., Councilor for District 3. Reading left to right—Waldo B. Newell Jr., M.D., Enid, Oklahoma, President Garfield-Kingfisher County Medical Society; Roscoe C. Baker, M.D., Enid, Oklahoma, Secretary Garfield-Kingfisher County Medical Society; Virgil R. Hamble, M.D., Enid, Oklahoma; Bruce H. Hinson, M.D., Enid, Oklahoma; Paul B. Champlin, M.D., Enid, Oklahoma (Both Past Presidents Oklahoma State Medical Association); C. M. Hodgson, M.D., Kingfisher, Oklahoma, Councilor, District 3.

The Wests have four children, a son and three daughters. The son, Kelly M. West, M.D., an internist of Oklahoma City, is associated with the University of Oklahoma School of Medicine as Instructor in Medicine.



T. H. McCARLEY, M.D., left, receives fifty-year pin from L. S. Willour, M.D. at ceremonies honoring him in McAlester, October 17.

McAlester Honors T. H. McCarley, M.D.

McAlester citizens, as well as the Pittsburgh County Medical Society, the State Medical Association, Blue Shield and the Board of Health, recently payed tribute to T. H. McCarley, M.D., of McAlester for fifty years of medical service. The event took place in McAlester's Aldridge Hotel on October 17.

A native of Kentucky, Doctor McCarley has spent most of his very active life in McAlester. Since moving to Oklahoma, he has been honored many times for his contribution to organized medicine, public health and other work designed to improve the health care of Oklahomans.

The celebration began with a dinner which was sponsored by the county medical society and limited to physicians and wives. Following the dinner, the group moved to a larger room where the main events of the evening were open to McAlester citizens. S. L. Norman, M.D., President of the county society, presided at both sessions.

50 Year Pin Awarded

The Oklahoma State Medical Association represented by President John Flack Burton, M.D., awarded Doctor McCarley with a Fifty Year Pin. His longtime friend, L. S. Willour, M.D., McAlester, made the presentation. Among other honors, he is a former

president of the association, 1933-34.

Receives Certificate

In addition to the pin Doctor McCarley received a certificate from Grady F. Mathews, M.D., Commissioner of Health. Doctor Mathews commended him for his long and faithful service as a member of the original State Board of Health.

N. D. Helland, Director of the Oklahoma Blue Cross-Blue Shield Plans, rounded out the program by expressing his gratitude for the work Doctor McCarley has done as a member of the Blue Shield Board since the plan was initiated in Oklahoma.

State Auxiliary Holds Fall Conference

The annual Fall Conference of the Auxiliary to the Oklahoma State Medical Association was held October 29, 1957 at the Oklahoma State Medical Building.

Presiding at the meeting was Mrs. John Powers Wolff, State President. General Chairman of the Conference was Mrs. Joseph J. Maril, Corresponding Secretary. The Auxiliary Pledge of Loyalty was led by Mrs. L. Gordon Livingston. The invocation was given by Mrs. Iron Hawthorne Nelson, President-Elect.

Mrs. E. C. Mohler, Chairman of Program and Health, presided while reports from the following committees were presented: Public Relations, Mrs. Clifford Bassett; Organization, Mrs. Peter MacKercher; American Medical Education Foundation, Mrs. E. H. Shuller; Today's Health and Bulletin, Mrs. Cleve Beller; Legislation, Mrs. John Records; Safety, Mrs. H. C. Wheeler; Mental Health, Mrs. E. B. Thommason; Civil Defense, Mrs. Milton Berg; Recruitment, Mrs. Tom Sparks; Doctor's Day, Mrs. Elton LeHew; Doctor's Hobbies, Mrs. W. R. Loney.

Reports from special committees and officers were presented by: Historian, Mrs. John Hayes; Nurse Loan Fund, Mrs. M. L. Henry, Chairman, and Mrs. Carroll Taylor, Secretary; Press and Publicity, Mrs. Samuel T. Moore; Advisor for Student Auxiliary to A.M.A., Mrs. Richard Clay; Revisions and Resolutions, Mrs. Joseph Kelso.



Student A.M.A. Entertained By State Association

Over two hundred members of the University of Oklahoma Chapter of the Student American Medical Association attended a dinner meeting that was recently sponsored by the O.S.M.A. The annual affair was held October 14 at the Hillcrest Country Club in Oklahoma City.

Officers and councilors of the State Association were hosts to their future colleagues and augmented the get-acquainted session with a brief indoctrination program regarding the students' future participation in organized medicine.

John Flack Burton, M.D., President of the O.S.M.A., briefly pointed out the value of physicians becoming active members in their county, state and national organizations, and advised the students regarding future problems upon which medicine must speak with a "single, forceful voice."

Following his remarks, a new American Medical Association film, entitled "The Case of the Doubting Doctor," was shown. The movie portrayed a physician who disbelieved in organized medicine until his colleagues disproved his erroneous attitudes regarding the organization and function of the A.M.A.

As an innovation to previous meetings, preceptors and preceptees from over the state were invited, several of whom were able to come. Mark Everett, Ph.D., Dean, and A. N. Taylor, M.D., represented the medical school staff.

Student officers of the medical school organization are Ed Brandt, President; Bill Kirkham, Vice-President; Paul Hauk, Secretary; Norma Sneed, Treasurer.

Oklahoma Physician Attends Pan American Congress

Henry H. Turner, M.D., Oklahoma City, is in Buenos Aires attending the Pan American Congress on Endocrinology. Accompanied by his wife, Doctor Turner made the trip on a grant from Schering International.

While in South America, Doctor Turner will give lectures in Rio de Janeiro, Brazil, Santiago, Chile, and several other cities. He and Mrs. Turner will also spend several weeks visiting all capital cities of the continent.

Prior to leaving for Buenos Aires, Doctor Turner attended the Post Graduate Assembly in Endocrinology held at the University of Georgia, Augusta. He served as a member of the faculty for the Assembly.

Oklahoma City Physicians Attend Stockholm Meeting

Oklahoma City physicians attending the Eleventh International Congress of Dermatology held in Stockholm, Sweden, July 31 to August 6, 1957, were Hervey A. Foerster, John H. Lamb, and Phyllis E. Jones.

Doctor and Mrs. Lamb toured Norway, Denmark, and visited Vienna before the Congress where Doctor Lamb read a paper, "Solar Dermatitis."

Doctor Foerster, who toured clinics and hospitals in Holland, Germany, Austria, Italy, France, Norway, Denmark, Switzerland, and England, reported that about 1800 physicians representing 51 countries attended the meeting.

Doctor Jones spent six weeks in touring Norway, Denmark, Germany, Switzerland, France, and Italy after the meeting adjourned on August 6.

Doctor Burton Speaks

John Flack Burton, M.D., President of Oklahoma State Medical Association, was principal speaker at the October dinner meeting of the Comanche-Cotton Counties Medical Society held October 8, 1957 in Lawton.

Oklahoma City Clinical Society Holds 27th Annual Meeting

The Oklahoma City Clinical Society held its twenty-seventh annual three-day conference at the Biltmore Hotel, Oklahoma City, on October 28, 29, and 30, 1957.

Outstanding Program Presented

An outstanding program of postgraduate teaching was presented, including lectures and discussions by fifteen distinguished guest speakers selected from various medical and teaching centers throughout the nation. In addition to the general assemblies there were specialty lectures, a clinical pathologic conference, and daily luncheon roundtable question and answer sessions.

The entertainment included a banquet on Monday evening at which time the Oklahoma County Medical Society was host to the guest lecturers and out-of-town physicians. Kenneth McFarland, Ph.D., of Topeka, Kansas, was principal speaker at the banquet. Doctor McFarland is Educational Consultant and Lecturer for General Motors Corporation and Educational Consultant for American Trucking Association, Inc.

On Tuesday evening, following a social hour, there were nine specialty dinners held, each group presenting its respective guest speaker. These groups were: Surgical and Genito-Urinary; Obstetrics and Gynecology; Pediatrics; Anesthesiology; Orthopedic; Dermatology; Internal Medicine and Allergy; Ophthalmology, Otolaryngology, and Rhinology; Radiology and Pathology. The specialty lecturers were arranged so that one of the guest speakers presented a forty-five minute paper on some phase of his specialty and this was followed by a forty-five minute period of questions and answers.

To climax the three-day conference, the annual dinner-dance sponsored by the Oklahoma City Chamber of Commerce was held in the Persian Room of the Skirvin Tower Hotel.

Clinical Society Officers

The Clinical Society officers are: Herman Fagin, M.D., President; Charles Hugh Wilson, M.D., Director of Clinics; Ralph A.



DISPLAYS OF 36 EXHIBITORS were visited by 1,136 registrants.



REGISTRATION OF PHYSICIANS for the 27th Annual Clinical Meeting totaled 664.

Smith, M.D., Vice-President; Vernon D. Cushing, M.D., Secretary; and Thomas C. Points, M.D., Treasurer.



Research Gift Chapel in Daily Use at Medical Center

The Chapel of the Oklahoma Medical Research Foundation, pictured above, has been in daily use by patients, their families and friends, staff members and others in the University of Oklahoma Medical Center since its dedication on Easter Sunday, 1957. Presented as a gift by the construction crafts of the American Federation of Labor, the contemporary building is estimated to have cost \$27,500 had it been a commercial venture.

Appointments of the Chapel are non-denominational; but, rather, are symbolic of the Fatherhood of God and the brotherhood of man. Focal point for the room is a series of six Italian lights which reflect a subdued pattern on the altar table. The modern functional design permits a hospital bed to be brought to the altar of the Chapel which is equipped with an electric organ and robing room.

A committee representing the three major faiths and Medical Center is in charge for arrangements for use of the Chapel.

Officials of the Foundation, the staff, the patients all realized the real need for a place

of worship at the Medical Center, but funds were not available for its construction. The need was explained to leaders of organized labor groups during the summer of 1955. The request for help set up a chain reaction that was to involve hundreds of people in every section of the State.

An Oklahoma City firm of architects and engineers prepared plans and specifications for the structure as a donation. Union groups in all parts of the State made pledges to help on the project. Suppliers and contractors were contacted by the union men who either gave materials as outright gifts or who furnished them a greatly reduced prices.

Actual construction was begun on October 14, 1956. For over a year union craftsmen donated their weekends and time after regular hours to build the Chapel.

So it was that Hugh G. Payne, Executive Officer of the Foundation, described the Chapel, "The end product of a sincere desire to perform a service . . . 'labor of love' by skilled AF of L craftsmen of Oklahoma."



LIFE MEMBERSHIPS were awarded to the above Oklahoma City physicians by the Oklahoma County Medical Society recently. Those receiving the honor, as pictured from left to right, were: Eva Wells, M.D.; Cary W. Townsend, M.D.; Wilson Lane, M.D., S. E. Frierson, M.D.; and Lucile Blachly, M.D.

Boston Physician Addresses Regional ACP Meeting

Chester S. Keefer, M.D., Professor of Medicine at Boston University School of Medicine, was principal speaker for the Regional Meeting of the American College of Physicians held in the Skirvin Hotel, Oklahoma City, on September 28, 1957. Doctor Keefer, who is a Regent of the national organization, presented a scientific paper and participated in a panel discussion on antibiotics. He was also guest speaker for the evening program to which wives of members and guests were invited.

Approximately one hundred college members from Arkansas and Oklahoma attended the one-day meeting where members and guests presented papers dealing primarily with heart and blood vessel diseases, infectious diseases, and the use of antibiotics.

Serving as General Chairman for the meeting was Bert F. Keltz, M.D., F.A.C.P., Governor for Oklahoma. In charge of the local arrangements committee was George N. Barry, M.D.

Oklahoma members of the College taking part on the program were: Leonard P. Eliel, M.D., F.A.C.P., Director, Oklahoma Medical Research Foundation; Philip M. McNeill, M.D., F.A.C.P., Professor of Medicine, University of Oklahoma School of Medicine;

Rufus Q. Goodwin, M.D., F.A.C.P., Professor of Medicine, University of Oklahoma School of Medicine; James J. Gable, Jr., M.D., F.A.C.P., Assistant Professor of Medicine, University of Oklahoma School of Medicine; Stewart G. Wolf, Jr., M.D., F.A.C.P., Professor of Medicine and Head of the Department, University of Oklahoma School of Medicine; Robert H. Furman, M.D., F.A.C.P., Oklahoma Medical Research Foundation; and Robert M. Bird, M.D., F.A.C.P., Associate Professor of Medicine, University of Oklahoma School of Medicine.

Associate members on the program were: Vincel Sundgren, M.D., Tulsa; Richard E. Carpenter, M.D., Assistant Professor of Medicine, University of Oklahoma School of Medicine; Philip C. Johnson, M.D., Chief of Radioisotope Service, Veterans Administration Hospital, Oklahoma City; and James F. Hammarsten, M.D., Oklahoma City.

Participating by invitation were: William E. Jacques, M.D., Professor of Pathology, University of Oklahoma School of Medicine; Thomas H. Haight, M.D., Assistant Professor of Medicine and Preventive Medicine and Public Health, University of Oklahoma School of Medicine; Byron Bailey, M.D., Tulsa; Charles W. Cathey, M.D., Oklahoma City; and William O. Smith, M.D., Oklahoma City.

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control, with minimal side effects, over a wide variety of infections - reasons why ACHROMYCIN is one of today's foremost antibiotics.

Book Review

Clinical Toxicology of Commercial Products—Acute Poisoning (Home & Farm). 1957, Marion N. Gleason; Robert Ed. Gosselin, M.D., Ph. D., and Harold C. Hodge, M.D. Red Cloth cover. Pp. 1160, \$16.00: The Williams & Wilkins Co., Baltimore, Md.

The authors of this book have accomplished an almost impossible task in assembling in one book a vast amount of information which is of value in treating poisoning by various substances.

The book is divided into seven sections:

1. First Aid and General Emergency Treatment.
2. Ingredients Index and Toxicity Ratings.
3. Therapeutics Index.
4. Supportive Treatment.
5. Trade Name Index.
6. General Formulations and Toxicity Ratings.
7. Manufacturers' Names and Addresses.

The Trade Name Index lists 15,000 different preparations, some of which are listed only by name apparently because the formulations are confidential and cannot be published in a book. For most of the listed preparations the ingredients are given with an asterisk marking those which may be responsible for the major toxic effects if poisonous amounts of the product are ingested. By turning to the Ingredients Index the information on symptoms and toxicity rating can be obtained.

The section on General Formulations is very helpful since in many instances the only information that is available is that it is a paint remover, for example. By referring to this section the physician can get some inkling as to the type of poisoning.

The book is well written and well organized. The user must study it in order to become thoroughly familiar with it before an emergency arises. A chart in the front of the book gives the general plan for its use. It is recommended for those physicians and clinics that frequently deal with cases of poisoning. It should be on the shelf of the emergency room of every hospital.—*H. A. Shoemaker, Ph. D.*

Ardmore Site of Red River Valley Section, AAGP Meeting

The Fourth Annual Meeting of the Red River Valley Section of the Oklahoma Chapter, American Academy of General Practice was held Sunday, October 20, 1957, at Lake Murray Lodge, Ardmore.

The meeting convened at 9:15 with Elmer Ridgeway, Jr., M.D., President, presiding.

Guest speakers for the Scientific Program were Carroll M. Pounders, M.D., Professor, Department Pediatrics, University of Oklahoma Medical School and Gerald Rogers, M.D., F.A.C.S., Clinical Professor of Gynecology University of Oklahoma Medical School.

Roger Reid, M.D., was in charge of arrangements for the meeting which was sponsored by Wyeth's Laboratories, Philadelphia.

Editor of Journal Attends National Conference

Ben H. Nicholson, M.D., Editor of the *Journal* of the Oklahoma State Medical Association, recently attended a Chicago conference sponsored by the State Medical Journal Advertising Bureau. He was accompanied by Don Blair who is Associate Business Manager of the *Journal*.

The Bureau, which is affiliated with the American Medical Association, is an organization which represents thirty-three state journals to national advertising accounts. Advertising space in all member journals is sold through this national office. Biennially, the Bureau sponsors a national meeting of state journal representatives to assist them in solving problems related to advertising, format, editorial and scientific content.

Approximately one hundred attended the two day session. Outstanding authorities in the professional publication field presented suggestions for the improvement of the journals represented. Several of the speakers who had appeared on previous programs commended the journals on their improvements in format and content during the past few years.

LeRoy Edgar Burney

(Continued from Page 530)

territories where it is analyzed in relation to tests here and abroad.

It is Doctor Burney's desire that the Service work in harmony with the medical profession, and he earnestly seeks our advice in matter relating to health. This was apparent in statements issued regarding Asian "flu" vaccine. It is also necessary for his Service to work closely with the manufacturers of biologicals insuring their safety and their potency. It is amazing how quickly the service brought the Salk vaccine under control—a new venture in the midst of a national hysterical state. We have every right to be intensely proud of the United States Public Service and the men who represent it. Perhaps more visits would help us understand better its function.

Letters to The Editor . . .

TO THE EDITOR

I should like to congratulate you on the recent editorial that you wrote "Concerning Medical Care of People Receiving Old Age Assistance." It is timely and with a lot of meat. I know that you have spent a lot of time in writing this editorial and I am sure that the medical profession of Oklahoma will surely gather much useful information from the article.

Most sincerely,

EDWARD K. NORFLEET, M.D.
Bristow, Oklahoma.

TO THE EDITOR

I have just read your editorial "Concerning Medical Care of People Receiving Old Age

Assistance" and am writing to congratulate you on your thought. I believe the editorial to be timely and necessary. I heartily concur with your idea that Blue Cross is the proper agency to handle this program. I feel we should make a concerted effort to elicit popular and professional support for this viewpoint.

On September 25th, 1957 I introduced a motion at the regular meeting of the Garfield-Kingfisher County Medical Society that the society urge the State Medical Association to foster a change to Blue Cross. After discussion, the motion passed. I hope there is a widespread feeling that this is a better method. I strongly feel that utilization of these funds in Blue Cross and Blue Shield premiums will remove an element of political danger and provide more economical services for the recipients. I sincerely hope you will continue to do all within your power to accomplish this, and I shall certainly continue to work to that end.

Sincerely yours,

RAY V. McINTYRE, M.D.
Kingfisher, Oklahoma.

TO THE EDITOR

Just a note to congratulate you on your September Editorial in the Oklahoma Medical *Journal* concerning the care of Old Age Welfare patients.

I wish everybody in Oklahoma could read it. I hope Mr. Rader, Commissioner of Public Welfare, read it.

Thanking you, I am,

Yours very truly,
BRUCE R. HINSON, M.D.
Enid, Oklahoma.

Have You Heard?

J. FRED MULLINS, M.D., Chairman of the Department of Dermatology, University of Texas School of Medicine, Galveston, Texas, was speaker for the October 14, meeting of the Tulsa County Medical Society for The Doctor James Stevenson Memorial Lectures Lecture.

ARNOLD P. FRIEDMAN, M.D., Assistant Professor of Clinical Neurology, Columbia University College of Physicians and Surgeons, New York, was speaker for the first of the fall series on monthly scientific meetings in September.

An addition to the LEHEW family of physicians was born September 25, 1957 in Pensacola, Florida. He is J. LESLIE LEHEW IV, son of J. LESLIE LEHEW III, M.D., of Pensacola, Florida, grandson of J. LESLIE LEHEW, JR., M.D., Guthrie, and great grandson of J. LESLIE LEHEW, SR., M.D. of Pawnee.

HERMAN F. FLANIGAN, M.D., of Tulsa was a guest speaker at the annual convention of the Mid-Continent Psychiatric Association held in Tulsa recently. MILFORD S. UNGERMAN, M.D., also of Tulsa, is president of the Association.

A. A. HELLBAUM, M.D., unit director of research laboratories at the University of Oklahoma School of Medicine, led a discussion on bone metabolism at Hillcrest Medical Center in Tulsa.

JOHN F. GRAY, M.D. and S. C. SHEPARD, M.D., both of Tulsa, have leased Ridgewood hospital at Sand Springs.

MARVIN ELKINS, M.D. of Muskogee was speaker at the September meeting of the Muskogee, Wagoner and Cherokee Counties Division of the Licensed Practical Nurses.

HARLAN THOMAS, M.D., Secretary of the Tulsa Academy of General Practice announced that FRANK H. LUND, M.D., New York, associate medical director of E. R. Squibb and Sons was guest speaker at the

first fall meeting. Dr. Lund's subject was "Tranquilizing Drugs."

CHARLES M. O'LEARY, M.D., discussed "The Complicated Duodenal Ulcer" at the meeting of the Okfuskee and Okmulgee Medical Society in September.

W. A. FUQUA, M.D., Grandfield, spent a month's vacation in California. The vacation marked the completion of a half-century of medicine in Oklahoma.

REX A. GRAHAM, M.D., was re-elected president of the Ottawa County Cancer Society in September.

T. H. MCCARLEY, M.D., attended the anniversary celebration of his graduation class at the University of Louisville Medical School, Louisville, Kentucky.

FORREST D. HARRIS, M.D., has announced plans to leave Ardmore and establish his offices in the Lawton Clinic Building in Lawton.

E. W. MABRY, M.D., of Altus, was awarded a certificate of appreciation at the reunion of his 1907 graduating class of the University of Tennessee. Eighteen doctors who graduated 50 years ago from the university were present for the reunion in October.

After residing in Frederick since 1922, ROY L. FISHER, M.D., and Mrs. Fisher have moved to King's Ranch, Arizona.

WILLIAM LOY, M.D., and RICHARD LOY, M.D., have moved into their new clinic building at Seventh and Leahy in Pawhuska.

BAILEY L. DIETRICH, M.D. of Boise City is planning to build a new medical center in Carnegie.

C. A. CASHMAN, M.D., of Okemah was appointed President of the Okfuskee County Tuberculosis Association in October.

T. J. LOWREY, M.D., opened his offices in Yukon last month.

25 YEARS AGO



Articles published in *The Journal* of the Oklahoma State Medical Association November, 1932.

The Importance of Early Diagnosis in Tumor of the Brain

Harry Wilkins, M.D., Oklahoma City

"We have, throughout our medical career, heard the cry for early diagnosis in every disease with which we deal. In some diseases, it prevents their dissemination by contact with other people. In others, the prognosis with an early diagnosis is a valuable aid to the economic management of the case. In every disease, it permits the application of the proper treatment at a time when the treatment will do the most good and possibly effect a complete cure. I know of no disease in which the above remarks are more applicable than in cases of tumor of the brain.

"In the late recognition of this all too frequent disease, the economic factor alone is worthy of interest, particularly at this time of financial stress. Not infrequently, extensive and expensive procedures are resorted to which fail to give a clue as to the cause of symptoms. Sometimes the symptoms of vomiting and headache are thought to be due to pathology in the abdomen that goes unproven at operation and the patient's symptoms persist. Glasses may be fitted and refitted in the attempt to correct the visual disorder without success. A large number of people seek aid from osteopaths, chiropractors and various charlatans who promise wonderful cures. This necessitates the expenditure of considerable money. We as physicians and surgeons, need not consider the economic factors further, as the duty we have to perform is that of administering to the sick in a way that gives the maximum relief. If it is impossible to effect a cure, our next duty should be to give the maximum symptomatic relief. This is a poor substitute for a cure, especially when important cerebral functions are permanently impaired. For instance the vision, the muscular control of an extremity or some permanent mental defects as produced by the growth itself or its surgical removal . . . "

The Management of Abortions

J. B. Eskridge, Jr., M.D., Oklahoma City

"The frequency of abortions has greatly increased during the last three decades. Spontaneous abortions

have increased considerably, but the percentage of criminal abortions has more than doubled since 1900. It is interesting to note that statistics show that only a small percentage of abortions in 1900 were criminal and that these few were performed on single girls, while today the married woman is the chief offender in criminal abortions. It is an appalling fact that today over 50% of abortions are either self induced or are performed by so-called specialists who consider that pregnancy is a disease that should be terminated before the end of the eighth week. The practice of criminal abortion has become such a menace that the lay periodicals and newspapers are discussing modes of curbing this evil . . .

"In classifying these cases all should be considered as infected abortions until they have been proven otherwise, as in at least 50% of spontaneous abortions there is a pre-existing infection (cervicitis, metritis, parametritis, salpingitis). As all criminal abortions, which are more than 50% of all abortions, are potentially infected cases, it would seem plausible to classify all as being potentially infected until they have passed a period of time to rule out an infection . . .

"The treatment of abortions resolves into three phases: 1. Control of the hemorrhage and support of the patient. 2. Emptying the uterus. 3. Treatment of any complications . . .

"The treatment of the complications resolves itself into the specific condition.

"Sapremia and endometritis are easily confused—it is best to treat them alike. Sedation, fluids as indicated, moist heat over the abdomen, removal of the decidua as indicated; never curette until at least seventy-two hours have elapsed following a normal temperature.

"Parametritis should be treated symptomatically with supportive methods, and by the use of hot rectal irrigations, and moist heat over the abdomen. No abscess should be opened until the patient has had about seventy-two hours to generate specific antibodies to the causative organism . . . "

Editorial Notes—Personal and General

DR. McCLAIN ROGERS, Clinton, who has been ill with influenza, is reported improved.

PITTSBURG AND MUSKOGEE COUNTY MEDICAL SOCIETIES have arranged to hold joint meetings, Pittsburg County rendered a program at Muskogee, October 24, 1932, and Muskogee County will render one at McAlester, November 28, 1932. Sebastain County Medical Society (Ft. Smith, Arkansas) will render a program at Muskogee on December 12th, and the Muskogee County Society will render one at Fort Smith, in 1933, the date not yet decided upon.

Deaths

C. O. WILLIAMS, M.D.
1882-1957

C. O. Williams, M.D., 75, died September 25, 1957, in Oklahoma City. A pioneer McAlester physician, Doctor Williams moved to that area in 1916. He later practiced in Stillwater, Haywood and Talihina.

Doctor Williams was awarded a Life Membership in the Oklahoma State Medical Association in 1952.

A. J. COLEY, M.D.
1858-1957

A. J. Coley, M.D., died at his home in Oklahoma City, October 16, 1957. Doctor Coley had practiced medicine for 67 years before his retirement in 1947.

Born in Alexander City, Alabama, Doctor Coley was graduated from Jefferson Medical School, Philadelphia, Pennsylvania, in 1880. He did post-graduate work at New York University.

Doctor Coley, who was Oklahoma's oldest physician, was an Honorary Member of the Oklahoma State Medical Association and the American Medical Association.

JACOB P. BRAUN, M.D.
1905-1957

Jacob P. Braun, M.D. died of a heart attack in Hobart October 14, 1957.

Doctor Braun was graduated from the University of Oklahoma School of Medicine in 1930.

GEORGE MONROE DAVIS, SR., M.D.
1879-1957

George Monroe Davis, M.D., Sr., 78, pioneer Bixby physician died October 7, 1957 in Tulsa.

Born in Barberville, Kentucky, Doctor Davis had been a practicing physician in Bixby for 42 years. Doctor Davis was graduated from the University of Louisville School of Medicine, Louisville, Kentucky in 1908.

Doctor Davis was a Life Member of the Oklahoma State Medical Association, the American Medical Association and the Tulsa County Medical Society.

PHYSICIAN PLACEMENT

Internal Medicine

Louis K. McCown, 1516 Third Ave., N.E., Rochester, Minnesota, age 33, married, Tulane, 1949, Residency at Mayo Clinic, Veteran, available January 1, 1958.

Bartis M. Kent, 225 Koser, Iowa City, Iowa, age 32, married, Baylor, 1948. Three year residency at Baylor, veteran, available July, 1958.

Neurosurgery

Bahif S. Salibi, M.D. (Currently Captain, MC U. S. Army) 121 Evac. Hosp., APO 971, San Francisco, California, age 35, married, Board qualified in Neurosurgery, except for the two years of private practice required by the Boards, available October, 1958.

Pediatrics

Marilynn L. Miles, Kemmerer Bldg. Norton, Virginia, age 36, single, Albany Medical College, 1950, residency at University of Michigan, available immediately.

Thoracic and Cardiovascular Surgery

Wayne E. Hird, M.D., McGuire VA Hospital, Richmond 19, Virginia, age 31, married, Korean veteran, University of Kansas 1950, Board qualified in General Surgery, Thoracic and Cardiovascular exams will be completed by next July. Will be available July, 1958.

Obstetrics & Gynecology

Herbert Claibrone Jones, Jr., Box 166, University Hospital Charlottesville, Virginia, age 30, married, University of Virginia 1951, finishing board qualifications, will be available Spring, 1958.

General Surgery

Duane H. Dougherty, M.D., 201 Avon Road, Tonawanda, New York, age 30, married, veteran, New York University 1953, board qualified, will be available July, 1958.

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District 14 Meets At Quartz Mountain Lodge

Physicians of District 14, held their annual meeting November 4, in the Quartz Mountain State Park. The Jackson County Medical Society served as host to the group with Wayne A. Starkey, M.D., Altus, acting as program chairman. Councilors for the area are J. B. Hollis, M.D., Mangum, and R. R. Hannas, M.D., Sentinel.

Special guests for the evening included John Flack Burton, M.D., President of the OSMA; W. R. Bethel, Assistant Executive Director of Blue Cross-Blue Shield; Don Blair, Associate Executive Secretary of the OSMA; Windham Hill, Claims Supervisor of Blue Cross-Blue Shield; Walter Montgomery, Area Representative in Lawton for Blue Cross-Blue Shield, and several physicians from the Altus Air Force Base.

Mr. Bethel was principle speaker for the evening, addressing the group on "Pressure Groups in Health." He gave a comprehensive picture of changing economics in the practice of medicine, emphasizing the vital role to be played by voluntary health plans.

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Patent Ductus

(Continued from Page 549)

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Public Law 880

Introduction

There has been enough misunderstanding regarding the implications of and application of Public Law 880 to justify a full-dressed attempt at clarification. This law amends the Social Security Act to provide additional funds on a matching basis for medical care of people in four categories of dependence: Old Age, Aid to Dependent Children, Blind, Totally and Permanently Disabled. The present aid to these people is provided for by the Oklahoma Sales Tax and is administered by the Oklahoma State Department of Public Welfare under the direction of the Director of Public Welfare, Mr. Lloyd Rader, and the Oklahoma Public Welfare Commission.

The Sales Tax and the Department of Public Welfare

By Oklahoma Statute each sales tax dollar is divided as follows after the tax commission withholds 3% for operation:

Old Age	76 %
Blind	2 %
Aid to Dependent Children	13 %
Child Welfare	1 %
Totally & Permanent Disabled	2½%
Administration	3 %
Emergency Fund	1½%
Crippled Children	1 %
<hr/>	
100% (of the 97% remaining)	

This fund is known as the assistance fund and is used to bring the dependents income up to a given level when his primary resource is not adequate. Always by the philosophy of the Public Welfare Department and by law these funds are secondary and primary resources must be taken into account first. For example if after going over

an old age pensioner's situation a total of \$92 is decided on as what he needs for subsistence and he receives \$30 from social security (primary resource)—only the balance of \$62 could be provided by D. P. W. To aid the state, the Social Security Law already provides matching funds of 4/5 of the first \$30 and 1/2 of the rest up to \$60. Therefore in this case the Federal Government would provide \$24 (4/5 of 30) + \$15 (1/2 of 30) or \$39 and D.P.W. would provide \$23. This seems like a small amount to take from the \$40,000,000 annual sale tax assistance fund; but with 197,000 people on Assistance rolls in all categories an increase of \$0.50 per month each withdraws from this fund \$1,182,000 each year. It is, therefore, easy to understand that the Department of Public Welfare must take advantage of all resources (primary and Federal) to be able to fulfill its obligations of assistance and why the fund is called an assistance fund.

Public Law 880

This law provides matching funds for medical care up to \$3 per month (\$6 total) for Old Age Pensioners and \$1.50 per month (\$3 total) for A D C Children. Additional funds for this purpose, however, were not provided by the legislature. To provide medical care and to obtain Federal funds for this purpose the D.P.W. must use any reserve that it has plus any excess in any of the allocations listed above and be as exact as is possible under the law in providing assistance. Any appreciable reduction in Sales Tax take would be catastrophic to the Welfare program. There are several things developing in its favor, however, chief of which is that an increasing number of people who come on the rolls of Old Age pensions have Social Security, where as, a few years ago very few did.

The Oklahoma State Medical Association And The Welfare Department

After the law was passed, Mr. Rader

asked representatives of the Oklahoma State Medical Association what sort of a program they wanted which would be reasonable and within the limits of the funds that would be available. Doctor McClure, the president appointed a committee, headed by Dr. C. M. Bielstein to study the problem. This committee studied the problem during the winter of 1956-57 and presented a program for payment to physicians for medical care to the Council. The Council turned the program down but it was later accepted by the House of Delegates in extraordinary session and was then accepted by the Commission of Public Welfare. The manual of procedure published and distributed by the D.P.W. is the directions for implementing a program which was developed by a Committee of the O.S.M.A.

The Old Age Pensioner

Much of the misunderstanding in this category stems from a difference in philosophy among physicians. *Are these people just medical indigents to be given medical care free just as poor people have always been?* Many physicians consider them so and according to this concept there can be no quarrel with their attitude.

Should the recipient of Public Assistance be considered a retired citizen receiving a pension much as a retired railroad employee might do, and the money allocated for medical care be considered a part of his pension to be spent by him as he needs it? The writer subscribes to this concept as editorials in previous issues have indicated.

Is This Socialization of Medicine?

There can be no doubt of this. The fact that it is limited makes it no less galling to many physicians, but does the need exist? Apparently the Congress did not think that these people were getting sufficient medical care and adopted this method of attempting to secure it for them. The advisors to the Congress must have been the many State Welfare Departments through the Department of Health, Education and Welfare. They should be in a position to know and perhaps we should give them credit for being honest in their appraisal of the situation. If we know a surer less tainted meth-

od, we should come up with it.

I think Blue Cross and Blue Shield offers us the one less tainted method and is our only chance to remove such social programs from the political arena. Although Mr. Rader has discussed the matter with Mr. Helland (Executive Director of Blue Cross) and has asked him to come up with a program he does not think the present financial structure behind the program would safely permit a contractual arrangement; nor does Mr. Helland think that Blue Shield could enter into such a program unless the O.S.M.A. could and would protect it against abuses. Both of these problems are ours to help solve.

Solve them we must, because next on the agenda of socialization is the medical care of recipients of Social Security whose income will be too great for D.P.W. assistance but not considered adequate to provide medical care. This will be a much larger group and Congress would be derelict in its duty to permit us to develop our own program for these when we have failed in efforts to develop a satisfactory one for a smaller group.

Perhaps there is small comfort to be gotten from such thoughts—this is the price we must pay for the loss of the small farm on which grandma and grandpa looked after the home, the cooking and the kids while ma and pa did the chores and looked after the crops—and the small shop which grandpa could tend part of the time while grandma could help with the work at home. There are no longer any pastures to turn the old folks into. There is no room for them in the small homes and apartments of their children. This is the hidden extra cost of getting our things cheaper in chain stores and dime stores. The intellectual endowment and ability to earn and save is not equally proportioned among us. Those whose menial tasks are done by others must help them when they get too old to take care of themselves. Better this than rake our own leaves, sweep our own buildings, burn our own garbage and teach our own children their three R's. The price of what we call progress is a leveling process of taxing the more fortunate to help the less fortunate when he can no longer help himself. No

wishful thinking on the part of the medical profession can make this less true.

Aid To Dependent Children

Here again the philosophy and the law of assistance has to be wrestled with. Primary resources must be used first before D.P.W. pooled funds for Federal matching can be touched. The Oklahoma Crippled Children's Law does not exclude any physical malady from the purview of the Crippled Children's Commission. Therefore the funds of the Commission for the care of sick children are a primary resource and must be used before pooled funds can be touched. County funds collected for the care of sick children are also a resource. This means that during each quarter while the Commission has funds all children can be cared for, but toward the end of the quarter only ADC Children can have their care paid for. Since the Oklahoma State Medical Association has established a policy of caring for Commission Children without charge for professional service only the hospitals are involved and they must take sick children during the period of each quarter in which the Commission is broke without reimbursement. The Children's Hospital at the University of Oklahoma Medical Center takes the lion's share of these children and is the hardest hit.

It was obvious to the Department of Public Welfare that, since the Crippled Children's Commission each quarter runs out of money, there is considerable unmet need in the care of Crippled Children including ADC children. If some area of sickness in which the Crippled Children's Commission did not operate for ADC children could be defined, then in these areas the funds of the Commission would not be a resource and the D.P.W. pooled funds could be directly applied thus conserving the Commission's funds for other indigent children and permitting it to pay hospitals throughout each quarter. This was the reason that the D.P.W. on the advice of its medical advisory committee selected certain categories of sickness to be excluded from its sphere of operation. This does not mean that other indigent children with excluded illnesses would be denied care. The plan was acceptable to the Children's Bureau and to the

Federal Department of Public Welfare. Mr. Rader desires that the same standards of Hospital and Medical care as applied by the Crippled Children's Commission for ADC children under its care be applicable when these children are receiving care with money from the D.P.W. pooled funds. This would be much easier and a great deal of confusion would be avoided if the O.S.M.A. would adopt the same attitude toward fees for professional services for these as it has toward other indigent children. The concept of the station of the child who is indigent through birth or circumstance and has his life ahead cannot be the same as that of the old man who can work no longer.

Conclusion

Congress has appropriated funds to help the states secure adequate medical care for those people in four categories of dependency, presumably because it had been convinced that the care of these people had been getting was not adequate. The record of performance indicates that Mr. Rader and the D.P.W. desired the Medical profession to develop the program for the use of these funds. There is no evidence that I have been able to find that this was not done in good faith but also with an earnest desire that these dependent people be permitted to use the funds for the purpose for which they were intended. To this extent he may be considered an advocate of socialization of medicine—to this extent I am also. There is, however, no evidence apparent to me that socialization per se is the goal. We should, however, feel much better about the whole business when Blue Cross and Blue Shield can take over its administration.—B.H.N.

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ANTIGENIC PNEUMONITIS

RAYBURNE W. GOEN, M.D.

In 1941, Rendich, Levy and Cove¹ described a condition which they termed "azotemic pneumonia." This was characterized by radiographic findings of symmetrical, diffusely increased, irregular densities, located in the central and basal lung fields. This density decreases gradually as it extends to the lung periphery and, characteristically, spares the apices and extreme bases. They found the disease associated with elevation of blood urea nitrogen and creatinine, but remarked that only a small percentage of cases of known azotemia exhibited characteristic pulmonary findings. They postulated that the toxic substance acting on the vascular structures in nephritis was also acting in similar fashion on the vascular structures of the lung, with resulting interstitial pulmonary edema. That this theory was well founded has been confirmed by subsequent studies and reports in the literature.^{2,3}

Sante and Wyatt⁴ have recognized the relation of azotemic pneumonia to the collagen diseases, and have proposed the term "antigenic pneumonitis" instead, because azotemia was not considered of etiological significance, but rather a secondary manifestation of the underlying pathological condition: a hypersensitivity reaction involving vascular tissues of the kidney and lung parenchyma. Roentgenograms of the chest show blotchy areas of increased density radiating outward toward the periphery, but stopping short of the outer edges. This is in contrast to the findings in acute pulmonary edema from cardiac failure, in which the infiltrate extends to the periphery and especially to the bases, and is accomplished by cardiac enlargement and clinical evidence of heart failure. On microscopic examination, the lungs show an exudate of interstitial mononuclear infiltration intimately associated with sweeping bands of hyaline membrane plastered against septal walls. Sante

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and Wyatt divide the collagen diseases into two groups, and describe the condition in the first group in association with sensitization reaction to foreign proteins, hypersensitivity reactions to drugs, blood incompatibility in transfusions, acute glomerulonephritis and periarteritis nodosa. A second group of the collagen diseases show similar findings only in the terminal stages: disseminated lupus erythematosus, dermatomyositis, scleroderma, rheumatoid arthritis, and rheumatic pneumonitis.

Blankenhorn, Knowles and Zeek,⁵⁻⁷ in a clinico-pathological study of such cases, have termed lesions in the first division of collagen diseases "necrotizing angiitis," and distinguished between periarteritis nodosa and hypersensitivity angiitis within this group. Periarteritis nodosa involves the small and medium sized arteries of the muscular type, predominantly at the branchings in the hilus of a viscus, with lesions of various ages present at the one time, and proliferation precedes exudation. Granulation tissues and small aneurysms form, leading to vascular obstruction and hypertension. Hy-

persensitivity angiitis involves the arterioles, venules, capillaries and small arteries within the viscera and interstitial tissues, and consists of an exudative type of reaction of uniform age. Visceral interstitial inflammation, necrotizing glomerulonephritis and fibrinoid pneumonia result. The condition is attended by a very high mortality rate in the vast majority of cases, regardless of etiology.

The following case report was prompted by at least three circumstances:

- 1) The condition appeared in association with a toxemia of pregnancy (pre-eclampsia), not usually mentioned in the list of "collagen diseases."

- 2) Recovery of a moribund patient ensued.

- 3) The condition, though a rare complication of this and other diseases, singly, will be found much more frequently if looked for among these various conditions.

Search of the literature has revealed a similar case reported by Fulsher and Sichel⁸ in December 1954. Their case was parallel in most respects to the one presently reported, including some similarities in treatment program and in the fact that recovery occurred.

Case Report

The patient was a 29 year old white female, seen in the Emergency Room of the hospital for the first time on July 11, 1954. She complained of severe dyspnea of 28 hours duration. She was eight months pregnant, but had not seen an obstetrician or physician with this pregnancy. She had been well until 2 a.m. the day before admission, when she awoke from a sound sleep short of breath, with pain on breathing, especially over the lower end of the sternum. She was so orthopneic that she sat up the remainder of that night; was somewhat short of breath with some "wheezing" during the next day, and sat up all the night immediately prior to admission. She had noted some swelling of her feet for approximately two weeks. There was no accompanying cough or sputum, nor any history of antecedent cough, cold or sore throat in the preceding days, weeks or months. There

was no chill, fever, headache, nausea, vomiting or visual disturbance. There were no unusual associated factors such as psychic trauma, dusts or pollens, although, she had suffered some "asthma" with four previous pregnancies, never requiring medical treatment. Her past history was uninformative except for the acquisition of a parakeet a week prior (July 3, 1954). Her father had died of complications of high blood pressure seven years previously, while her mother and seven siblings were living and well.

On examination, the patient was an acutely ill, cyanotic, white female who was desperately dyspneic and orthopneic; temperature was 99°; pulse 120; respirations 40; blood pressure was 140/110. The alae nasae were dilating with each breath, but she was not wheezing. The pupils were somewhat dilated, but the fundi were normal. Her breasts were engorged. The accessory muscles of respirations were being used. There was dullness over the right lower anterior chest with fine crepitant inspiratory rales over the lower half anteriorly; there were rough breath sounds along the left sternal and right sternal borders; no rales or wheezes were heard posteriorly. The heart sounds were of good quality, regular rhythm, and no murmurs, thrills or rubs were heard. The abdominal examination revealed distention with a gravid uterus extending to just below the costal margin; the fetus was in R.O.P. position with fetal heart tones 144 in the vicinity of the right groin. Pelvic examination was not performed at this time. A 1+ pedal edema was present.

A roentgenogram taken immediately upon admission, revealed dense, partly confluent, peribronchial type infiltration, involving the hilar and central lung zone on the right, decreasing toward the periphery and the costophrenic angle, with a similar, but less intense, infiltration on the left. The cardiothoracic ratio of 14:29 was within normal limits, in spite of the transverse position from the pregnancy (figure 1). Electrocardiogram showed sinus tachycardia, normal conduction time, and slightly inverted T waves in leads 1, AVL, V1 and V2 on 7/12/54. On July 16th, there was ST depression in leads 1, 2, AVF and V4-V6 and low T waves throughout, with prolonged



FIGURE 1

QT conduction time (.36 with rate 120), and tall spiked P2 and 3. Both were interpreted as indicating "myocardial ischemia." Blood and urine studies on entry and thereafter are shown in figures 2 and 3.

Upon admission, the patient was immediately supplied oxygen by nasal catheter. Cedilanid, 1.6 mg., was given intravenously, followed thereafter by maintenance doses. When she was unable to raise a sputum specimen, a single injection of penicillin and streptomycin with 15 mg. of Chlortrimeton^R was administered. Six hours after

admission, she spontaneously delivered a 4½ pound male infant, in fairly good condition. An old clot of blood was present on the placenta, indicating some premature separation. Delivery was accomplished without anesthesia or episiotomy.

A retention catheter was inserted. Her condition following delivery was little changed, but the following day the respirations had increased to 52; pulse 140; blood pressure 132/116, and rales were heard in the right and left sides of the chest anteriorly. Basal rales were still not heard. A film of the chest (figure 4) revealed a startling increase in the bilateral pulmonary infiltration, though still sparing the periphery and bases. Tetracycline was started in view of the critical situation and prior to receipt of results of laboratory tests (figures 2 and 3). In the meantime, she continued desperately ill, with respirations up to 60 per minute and a blood pressure of 120-130/110-116. By July 14th (the third hospital day), bronchial breath sounds were present throughout the lung fields with medium and fine moist rales and a few fine rhonchi over the area of the right middle lobe and both bases posteriorly, with decreased resonance at the bases. Heart sounds were of fair quality; pulse 110-120; ocular fundi remained negative; breath was not uremic, edema had disappeared; temperature was 101° rectally. She still had no cough or expectoration. Mild hives were present on the thighs. Leukocytosis steadily increased to 35,500 on July 14th. Toward the evening of this day, she became mori-

URINE

Date:	7/11/54	7/12/54	7/13/54	7/14/54	7/15/54	7/16/54	7/17/54	7/18/54
Quant. /24 h:	100cc	250cc	950cc	610cc	740cc	1095cc	850cc	825cc
Sp. G.:	1.045	QNS	1.021	1.021	1.021	1.012	1.015	QNS
Albumin:	4+	4+	4+	3+	3+	3+	3+	1+
Occult Hgb:	—	4	—	—	—	3	Trace	—
Casts:	Many	35	Many	—	Loaded	—	—	—
RBC:	Some	20	Some	—	—	Many	Many	—
WBC:	Many	20	Loaded	Many	20	Loaded	Loaded	Loaded
Epithelial:	Many	Few	Many	Occ.	Some	Some	Some	Some

FIGURE 2

bund, with blood pressure unobtainable; heart rate 134; respiratory rate 52. Caffein and aminophylline were administered with slight improvement. The chest was now full of wheezes and coarse moist rales throughout, in addition to fine moist rales over the right lower anterior chest. It was considered noteworthy that there were no liver enlargement or tenderness and no peripheral edema.

On July 16th, with the patient still moribund, inhalation of 70% alcohol vapor was started through oxygen therapy apparatus. Breathing immediately became more comfortable; the respiratory rate reduced to 36 and, by the following day, there were fewer rales; her heart sounds were strong and she was much less apprehensive. Improvement rapidly continued over the next few days so that by July 22nd, oxygen was discontinued and she was able to sit up (Figure 5).

On July 23rd, her temperature spiked to

102°; her chest became full of rales and rhonchi again, with the respiratory rate rising to 40 per minute. The blood pressure was 136/114, with mechanical alternans. There was 1+ edema. The liver was three fingers below the costal margin and was somewhat tender. The urinary output was reduced. She had rather severely ulcerated hemorrhoids. There was thrombophlebitis of the left leg. The blood urea nitrogen was 12 (compared to a maximum of 50 on 7/15/54), and the urine characterized by a specific gravity of 1.011, 3+ albumin; 4+ occult hemoglobin, and it was loaded with RBC, WBC, epithelial cells and bacteria, but no casts. Thiosulfil for the urinary tract infection, anticoagulants and bed rest for the thrombophlebitis, and treatment similar to that previously administered for the respiratory condition was instituted, with rapid response.

On July 30, she received, by mistake, 100

BLOOD

Date:	7/11/54	7/12/54	7/13/54	7/14/54	7/20/54	8/6/54
RBC:	4.21	4.33	3.69		3.63	3.75
Hgb:	11.4	10.8	9.9		9.9	9.9
WBC:	22,600	28,500	28,950	35,500	25,000	7,900
Neut:	92	87	82	89	85	81
Myelo:					4	
Metam:					1	
Bands:	1	13	8	26	22	8
Segs:	91	74	74	63	58	73
Eosinos:	0-3	0	0	1	0	1
Monos:	0	4	6	5	0	4
Lymphos:	5	9	12	5	15	14
Date:	7/12/54	7/14/54	7/15/54	7/21/54	7/26/54	8/2/54
NPN:	49					
BUN:		42	50	12	14	12
Psitticosis:	1:64					1:64
CRP:		4+				
L.E.:						Negative
A.S.O.:					50 Todd Units	
Coombs:	Negative					

FIGURE 3



FIGURE 4

mg. of Chlortrimenton^R instead of 5 mg. which had been ordered with an injection of penicillin and streptomycin. Other than drowsiness, she suffered no apparent ill effect and, indeed, considerable clearing of the lung fields occurred during the next several days so that, by August 8th, she was discharged, greatly improved. The roentgenogram of the chest showed striking clearing of the pulmonary infiltrations previously described. The urine still showed 2+ albumin and many red cells and white cells, but no casts. A 500 cc whole blood transfusion was given (Figure 6).

Follow-up examination has subsequently revealed complete clearing of the urine. The blood pressure and the lung fields were normal. During the past year she has carried another pregnancy to term without untoward incident (Figure 7).

Comment

The question is raised: is this basically an acute glomerulonephritis complicating pregnancy, or a pre-eclamptic toxemia? Favoring acute glomerulonephritis is the prolonged duration and severity of hematuria, proteinuria, nitrogenous retention and hypertension. It is said that prolongation of these beyond a week suggests glomerulonephritis.⁸⁻¹⁰ On the other hand, pre-eclampsia is favored by the age, multiparity, occurrence in the third trimester, absence of history of infection, and edema of two weeks duration. Odds by far favor toxemia, as acute glomerulonephritis complicates preg-

nancy in only 0.01%, and almost invariably in primiparas under 25 years of age.

Pre-eclampsia is thought to result from a "toxin" (antigenic agent) liberated by the partially and prematurely separated placenta, as was found in this case. A hypersensitivity angiitis developed with renal and pulmonary exudative manifestations (necrotizing glomerulonephritis and fibrinoid pneumonia). No valid reason is offered why the pulmonary complications developed. Neither antecedent allergic history, nor eosinophilia, are thought to be factors.

As to treatment, the role of oxygen, digitalization and fluid balance and electrolyte is purely supportive. It is said that ACTH and cortisone are contra-indicated in acute glomerulonephritis.¹¹ It is probably likewise in pre-eclampsia, and hardly necessary because of the dramatic improvement usually occurring shortly after the uterus is emptied. Further, the vascular exudative reaction has already occurred by the time the disease becomes clinically evident. Corticosteroids affect only the formation of antibody, but do not interfere with antigen-antibody union or increase antibody excretion,¹² hence, would not undo the damage already done. It is doubtful if antihistaminics are rational; they act by nullifying the action of mono-amino oxidase, which inactivates epinephrine. Liberation of a histamine-like substance may be a factor, in which case, the immediate exudative reaction may be ameliorated by large doses of antihistaminics. The Swartz-



FIGURE 5

mann-type of delayed hypersensitivity reaction, most nearly resembling the mechanism of the condition at hand, is likely not mediated by histamine-like substances. Use of alcohol vapor inhalation may be entirely rational: it is used as an anti-foaming agent with local effect only on the air passages. It was originally introduced by Luisada and Cavorhees,¹³ as a means of treating pulmonary edema. In ordinary cardiogenic pulmonary edema, where capillary permeability is increased by hypoxia, a protein exudate forms: likewise, an exudate forms in hypersensitivity angitis, where the capillary damage occurs as a result of an antigen-antibody reaction. Probably in this condition, as in lower nephron nephrosis, repair occurs in approximately 14 to 21 days; if a person can meanwhile be kept alive, recovery may be complete.

Review of 24,475 deliveries at St. John's Hospital during the past seven and one-half years, discloses that the diagnosis of pre-eclampsia was made 60 times. No case, other than this, was complicated by pulmonary manifestations. No deaths occurred. Of 21 cases of eclampsia admitted to the hospital during the same period, with three deaths, pneumonitis occurred twice, with recovery in one. Sixty-seven cases diagnosed "toxemia of pregnancy" all recovered. Of 93 cases of acute glomerulonephritis treated in the hospital, none were associated with pregnancy. Five died, of which one showed pulmonary manifestations.



FIGURE 7

Summary

A case of antigenic pneumonitis complicating pre-eclampsia is described in a 29 year old multipara at the eighth month of pregnancy. Recovery occurred with supportive therapy, and particularly inhalation of alcohol vapor and administration of an overdose of antihistaminic. The diagnosis of antigenic pneumonitis should be considered in every case of pre-eclampsia or acute glomerulonephritis, as well as other hypersensitivity reactions, when accompanied by dyspnea or apparent "pneumonia" or pulmonary edema.

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FIGURE 6

CLINICAL STUDY OF ACYLANID

THOMAS J. LOWREY, M.D.

In recent years Acylanid* has undergone extensive clinical evaluation. Most studies^{1, 2, 3, 4, 5, 6} establish this drug as an effective agent in the treatment of congestive heart failure. Most of these reports also emphasize the finding that the gastrointestinal symptoms of Acylanid overdosage tend to appear earlier than the electrocardiographic changes and disappear more rapidly than those seen with digitoxin. Only one investigator⁷ failed to find any difference between Acylanid and digitoxin in this respect since none of the previous studies have been sufficiently controlled, it is possible that the results were influenced by the investigator's bias.⁸

The purpose of this study was to compare Acylanid and digitoxin mgm. for mgm. with regard to ease of digitalization and onset of and recovery from toxicity, utilizing a double-blind technique.⁸

Materials and Methods

This study was carried out with set dosages of each agent administered according to a double-blind systematized randomization technique. The digitalis preparations were coded as Drug A and Drug B. The investigator, the resident, and the patient at the time of testing did not know which preparation was being used at any given time.

The patients selected for this study were in congestive heart failure using the following criteria: (1) elevated venous pressure, (2) prolonged circulation time with Decholin, (3) tachycardia, (4) tachypnea, (5) pulmonary rales or edema, (6) pedal edema, (7) hepatomegaly, (8) evidence of enlarged heart or (9) pulmonary congestion on a roentgenogram of the chest and physical examination. In addition to the administration of digitalis, salt restriction and limited activity were prescribed as indicated. In only two instances was a diuretic administered. Usually most patients had been in the hospital for several day before digitali-

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This work was done in the Experimental Therapeutic Unit of the Department of Medicine of the University of Oklahoma School of Medicine, the VA Hospital, Oklahoma City, Oklahoma and Central State Hospital, Norman, Oklahoma.

zation was begun and some beneficial effects from bed rest and a low salt diet had already been observed. None of the subjects studied had received any digitalis preparation for at least 21 days prior to the beginning of this study.

Acylanid and digitoxin were administered orally. They were prepared in identical appearing gelatin capsules, each capsule containing 0.2 mgm. of the agent. During the first 24 hours a total dose of 1.6 mgm. was given in four equally divided doses at 6 hour intervals. During the next three days the patients were placed on a daily "maintenance dose" of 0.2 mgm. and beginning with the fifth day this was increased to 0.4 mgm. per day and continued at this dosage level for 17 days or until toxicity occurred.

The group receiving Acylanid consisted of nine male and five females whose ages ranged from 44 to 80 years (mean: 65 years). There were four subjects with hypertensive cardiovascular disease, six with arteriosclerotic heart disease and four with senile heart disease.

The group receiving digitoxin consisted of eleven males and one female with a range of 60 to 80 years (mean: 70 years). Three subjects in this group had hypertensive cardiovascular disease, six had arteriosclerotic

heart disease and three had senile heart disease (Table 1).

The effects of both glycosides were judged by daily pulse and body weight changes, serial electrocardiograms, venous pressures, circulation times with Decholin, roetgenograms of the chest, physical examination of the lungs for rales and clearing of edema physically. Serum K levels were determined prior to beginning the study, when toxicity occurred, and at intervals thereafter.

Satisfactory digitalization was judged clinically making use of all the data plus daily clinical observations as referred to above. Since the agents were administered by the double-blind technique, no prejudice entered into the decisions favoring one agent over the other.

All data were statistically analyzed.

Results

The results were summarized in Tables II and III.

Only minor differences between the two agents were noted. None of the differences were found statistically significant by appropriate tests (*t*-test, Chi Square Analysis or Snedecor's Confidence Interval Tables).

TABLE I
Dose Schedule and Clinical Data for Each Drug Group
Digitoxin Acyanid

Dosage in 24 hours		1.6 mgm.	1.6 mgm.
Maintenance next 3 days		0.2 mgm.	0.2 mgm.
Maintenance beginning 5th day		0.4 mgm.	0.4 mgm.
Number of Patients	Female	5	1
	Male	9	11
	Total	14	12
Age	Mean	65	70
	Range	41-80	51-84
Diagnosis	ASHD	10 (4 Senile)	9 (3 Senile)
	HCVD	4	3

TABLE II

Time and Dose Required for Digitalization and Onset and Recovery from Toxicity for Each Drug Group

		ACYLANID	DIGITOXIN
DIGITALIZATION		Mean (Range)	Mean (Range)
	Total Dose (mgm.)	1.90 (1.6-2.2)	1.8 (1.6-2.6)
	Time in Days	2.56 (1-4)	1.9 (1-5)
TOXICITY	Total Dose (mgm.)	3.73 (1.6-7.4)	3.64 (1.8-7.0)
	Time in Days	7.6 (1-17)	7.8 (2-16)
	Time for Recovery in Days	2.7 (1-6)	3.25 (1-6)

The average time required for satisfactory digitalization with Acyanid was 2.6 days with a range of one to four days. Digitoxin induced satisfactory digitalization on an average of 1.9 days with a range of one to five days. With Acyanid two patients were adequately digitalized in one day, five patients in two days, four patients in three days and two patients required longer than three days. With digitoxin seven patients were digitalized in one day, one in two days, three in three days and only one required longer than three days. One patient in the Acyanid group could not accurately be judged for adequate digitalization because of other complicating illnesses.

In each group there was one subject with atrial fibrillation at a fast ventricular rate. Acyanid required three days to reduce the ventricular rate to 80 to 90 per minute and to obliterate the pulse deficit; it took only one day to accomplish this with digitoxin in the other patient.

The amounts required for adequate digitalization are not significantly different in the two drug groups. The average amount of Acyanid required was 1.9 mgm. (range to 1.6 to 2.2 mgm) as compared to 1.8 mgm. of digitoxin (range 1.6 to 2.6 mgm).

Digitalis intoxication was considered present when the patient either exhibited gastrointestinal symptoms of anorexia, nausea, vomiting and diarrhea or had typical elec-

trocardiographic changes. The electrocardiographic changes considered to reflect toxicity consisted of premature beats, other arrhythmias, atrioventricular blocks and bradycardia. One patient exhibited visual color changes together with nausea and vomiting. One patient also became confused along with electrocardiographic changes of toxicity. There were no abnormal serum potassium levels at the beginning of each study and no significant changes in serum potassium levels were observed at the time that the patients exhibited toxicity compared to the initial determination in each subject.

The average time required to induce toxicity with Acylanid on this regimen was 7.6 days with a range of one to 17 days. Twelve patients exhibited toxicity in this group. One patient who had arteriosclerotic heart disease and tricuspid insufficiency was maintained on 0.4 mgm. Acylanid for six days (tenth day of study) without evidence of toxicity and left the hospital before completion of the study. Another patient with arteriosclerotic heart disease received 0.4 mgm. for three days (seventh day of study) when the study was stopped because of a recent myocardial infarction.

The average time to induce toxicity with digitoxin was 7.8 days with a range of two to 16 days (10 subjects). Two patients in this group did not develop toxicity. One of these patients received 0.4 mgm. of digitoxin daily for 10 days and the other received 0.4 mgm. daily for 17 days without developing signs or symptoms of toxicity.

TABLE III

Signs and Symptoms of Toxicity Manifested by Each Drug Group

		Acylanid	Digitoxin
		N = 12	N = 10
Subjective Findings Alone		4	0
Objective and Subjective Findings		4	4
Objective Finding	Irregular Pulse	4	6
	ECG	4	6

The average dose required to induce toxicity with Acylanid was 3.73 mgm. with a range of 1.6 to 7.4 mgm. The average dose required with digitoxin was 3.64 mgm. with a range of 1.8 to 7.0 mgm.

The average time for recovery from toxicity induced by Acylanid was 2.7 days with a range of one to six days (seven subjects). The other seven patients could not be included because of the following reasons: (a) One patient died of a recent myocardial infarction two days following the onset of toxicity; (b) Two patients were given additional doses of Acylanid after they had initial evidence of digitalis intoxication; (c) Two patients developed an arrhythmia which persisted in one case for 47 days and in the other the arrhythmia was still evident four and one-half months after Acylanid was withdrawn; (d) Two patients did not develop toxicity.

One patient, who could not be included in this study because of dosage error, deserves comment. He was given 1.6 mgm. of Acylanid on the first day and received 0.8 mgm. on the second day. A dose of 0.2 mgm. was then given for four days and he was then maintained on 0.4 mgm. daily for 28 days. On the eighth day of the study he developed a P-R interval of 0.21 seconds, and while he was continued on the drug, he maintained a P-R interval from 0.22 to 0.25 seconds without developing any other signs or symptoms of toxicity. After discontinuing the Acylanid the P-R interval returned to a normal range on the fourth day.

Another patient not included in the study received a total of 2.8 mgm. of Acylanid in thirty hours without developing any evidence of toxicity.

The average time for recovery from digitoxin intoxication was 3.25 days with a range of one to six days (eight subjects). Four patients were not included here for the following reasons: (a) Two patients did not become toxic; (b) One patient died of congestive failure complicated by atelectasis and pneumonia one day after developing premature ventricular beats; (c) One patient after three days of toxicity manifested by rapid atrial fibrillation was converted with quinidine to normal sinus rhythm.

The findings of digitalis intoxication were divided into subjective symptoms (anorexia, nausea, vomiting, colored vision) and objective signs (irregular pulse and heart beat, and electrocardiographic changes). In the Acylanid group there were four patients who developed gastrointestinal symptoms alone whereas with digitoxin there were none. There were four patients on Acylanid who developed gastrointestinal complaints and electrocardiographic changes at the same time as compared to three patients on digitoxin. In the Acylanid group four patients developed electrocardiographic changes alone compared to seven patients in the digitoxin group.

The electrocardiographic changes with Acylanid were premature ventricular or atrial beats in six patients (two had bigeminal and one had trigeminal rhythm) and first degree heart block in two patients. The electrocardiographic changes with digitoxin were atrial fibrillation in one patient, premature atrial or ventricular beats in four patients, atrioventricular block in one patient and bradycardia in four patients.

Summary

1) Digitoxin produced adequate digitalization in an average of 1.9 days with an average dose of 1.8 mgm. Acylanid required an average of 2.56 days and an average dose of 1.9 mgm. to adequately digitalize.

2) The time required to develop toxicity and the amount of the agent needed to produce toxicity were essentially the same for Acylanid and digitoxin. The average time required to recover from toxicity was 2.7 days with Acylanid and 3.25 days with digitoxin.

3) Electrocardiographic changes were noted in each of the ten patients who became

toxic with digitoxin. Electrocardiographic changes occurred in only eight of 12 patients on Acylanid who became toxic.

4) Four patients on Acylanid developed gastrointestinal symptoms alone as a sign of toxicity. All subjects who became toxic on digitoxin developed electrocardiographic changes.

5) Gastrointestinal symptoms of toxicity without electrocardiographic changes occurred more frequently in the Acylanid group than with digitoxin but the difference was not statistically significant.

Acknowledgement

The author wishes to extend his sincere appreciation to Dr. J. A. Hagans and Dr. M. L. Clark for their cooperation and undivided attention in preparation, organization and interest which made this study possible.

*Acetyl-digitoxin, Sandoz Pharmaceuticals, Hanover, New Jersey.

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RHEUMATIC FEVER PREVENTION

JEROME D. SHAFFER, M.D., and T. R. PFUNDT, M.D.

This is a report of a pilot study made under the auspices of the Oklahoma State Heart Association with the objectives of: 1. To devise a workable and economically sound method for throat cultures to diagnose all group A beta hemolytic streptococcal infections that might otherwise be missed. 2. To have those throat cultures interpreted by a competent bacteriologist in the shortest feasible time. 3. To have the reports of these positive throat cultures made available to the participating physicians within 24-36 hours so that arrangements can be made for adequate therapy against streptococcal infection. 4. To attempt to follow up on all positive throat cultures to see that the patients have received adequate treatment and have been rechecked three to four weeks after therapy to see if any case of rheumatic fever, nephritis or other complications has developed in those treated.

The theory of relationship of beta hemolytic streptococci to the development of rheumatic fever is an accepted medical concept. Frequent studies show that even the most competent physician will miss 20-40% of streptococcal infections unless bacteriologic studies are routinely used on all suspicious throat infections. The younger the child, the higher the percentage of diagnostic error without routine cultures because of the lack of classical symptomatology. These children with streptococcal infections will respond symptomatically to routine penicillin therapy, but will not be protected against the development of rheumatic fever because therapeutic blood levels will not have been maintained for the 10 days required for protection. In the past, no attempts have been made to make feasible and simple a method by which the first attacks could be eliminated by insuring adequate therapy to stamp out rheumatic fever through the private practitioner who first sees the infected throat. The financial cost of hospitalization, diagnosis and treatment of a single case of rheumatic fever can run into thousands of

THE AUTHORS

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Doctor Shaffer is Assistant Professor of Pediatrics, University of Oklahoma School of Medicine. He is a Life Member of The American Academy of Pediatrics and Chairman of the Committee for Prevention of Rheumatic Fever, Oklahoma State Heart Association.

dollars over the course of years and the cost of a program to eradicate rheumatic fever must be considered in this relationship, even discounting the human relationships involved.

Procedure

1. Selected interested peditricians participated in this pilot study using their own private patients. 2. Sterile swabs, petri dishes with media, mailing boxes with sealing tape and labels were supplied. 3. Suspicious non-diagnostic throats were cultured by the physicians who streaked the media, inserted the petri dishes in the mailing boxes and sealed them. Appropriate labels were attached and the boxes containing throat cultures were mailed out that day. 4. On receipt of the culture at the bacteriologic laboratory, cultures were examined and smears made if necessary for diagnosis. 5. All cultures were tabulated and itemized. 6. When positive cultures were found the participating peditricians were notified by phone the same day the culture was read. 7. Participating peditricians kept adequate

records on all children on whom cultures were taken and on receiving a positive report, those children were treated for a minimum of 10 days with penicillin to insure adequate protective blood levels during that period of time. Records were kept on complications, if any, and results of treatment.

The table of results listed a total of 427 throat cultures done and of the suspicious non-diagnostic throats which were cultured 21.4% were positive for beta hemolytic streptococci. Some of (11.6%) of the cultures were lost because of being turned upside down during the process of mailing. A few (.6%) of the cultures were molded over and could not be read. Improper labeling accounted for a 1% loss. Some (.4%) of the cultures were contaminated. All patients with positive throat cultures were treated with penicillin to maintain a blood level for a minimum of 10 days. In the treated group of patients there were no bacterial or non-bacterial complications recorded by the participating pediatricians and a minimum of four to nine months has elapsed since the cultures were taken and no missed complications have yet come to light. The unit cost per culture exclusive of the mailing cost to the pediatrician breaks down to \$1.03 per unit.

427 THROAT CULTURES PERCENTAGES

Beta Hemolytic Streptococcus	21.4%
Upside Down Lost	11.6%
Upside Down Saved	1.4%
Molded Over	.6%
Lost or No Number	1 %
Contaminated	.4%

Comments on Procedures and Results

Certain inherent difficulties in this pilot study became evident during its course. The study was started in the middle of the winter before the holidays and there were definite delays in delivery of cultures during the rush periods of mailing. Approximately 10% of the cultures were manhandled enough to loosen the cultured material and upset it so that they were bacteriologically valueless. We found that during the cold seasons, we got fewer positive throat cultures than when the weather became warm-

er, although clinically we would have expected that the number of positive cultures would have been as great or greater during the cold weather. In fact, several duplicate cultures were run during this period of time in which streptococci was found in those not mailed so that there is a definite disadvantage to this procedure being used during cold weather. We were also plagued by a tendency to contamination and overgrowth of our plates during this period of time. This of course raises the problem of our having missed some positive cultures in children who might then not have been adequately treated; however, at this time we have no report of any of the children with negative throat cultures developing any complications attributable to streptococcal infections. This may or may not be because the physicians themselves prescribed adequate treatment without the positive throat cultures. The significant result in our limited number of cases is the absence of any bacterial or non-bacterial complication in those children who did get a minimum of ten days of adequate penicillin therapy after their positive culture. Of great value to the participating pediatricians was the rapidity of the report allowing the maintenance of contact with the patient during the immediacy of the treatment for the acute illness and because the report was available so early to make sure that adequate antibiotic therapy was maintained for the ten day period. Without this positive report, therapy would not have been maintained. If the report was delayed, there would have been patient resistance to bringing in an apparently well child for further treatment. The availability of the cheap culture makes it economically worth while for the practicing physician to avail himself of this service, however, the difficulties inherent in the mailing (delays and temperature variance) prevent this from being the perfect method for mass streptococcal throat cultures. Under the auspices of the Oklahoma State Heart Association which has available volunteers, a runner pick up system might be devised for the larger communities to obviate the difficulties associated with weather, mailing and excessive handling. By calling the day a culture is taken, a runner could cover all doctors to pick up the cultures. This would

necessitate the availability to all physicians desiring to participate of a small incubator or other satisfactory means of keeping the cultures at 37° to facilitate bacterial growth to expedite the report.

Summary

A pilot study was devised to determine whether or not mailing of throat cultures to a central laboratory could result in speedy efficient diagnostic reports of these cultures. Clinically non-diagnostic throats were cultured and approximately 20% were reported to have beta hemolytic streptococci growing and these patients were adequately treated with penicillin for a ten day period.

In this treated group of patients with positive throat cultures there were no bacteriologic or non-bacteriologic complications even though this mailing technique is not the answer for mass culturing of throats on the private basis. All participating pediatricians have made arrangements to continue the routine throat cultures on a private basis because they were able to pick up 20% of their cases that had beta hemolytic streptococcal infections which otherwise would have been missed and inadequately treated.

Pilot study supported by funds supplied by Oklahoma State Heart Association and authors are indebted for the assistance of Drs. Harold Buchner, Louis Frank, George Lythcott and Sam Sepkowitz for their participation in the study.

Oklahoma POISON INFORMATION CENTER

The Oklahoma Poison Information Center began to function officially on April 16, 1956, under the sponsorship of the Oklahoma State Medical Association, the Oklahoma State Department of Health, and the University of Oklahoma Medical Center.

The General Supervisory Committee consists of the following representatives of organizations.

Oklahoma State Medical Association

H. V. L. Sapper, M.D., Chairman
Walter E. Sethney, M.D.
Wm. T. Snoddy, M.D.
Paul Champlin, M.D.
Kieffer Davis, M.D.
Frank H. Austin, M.D.

Oklahoma State Department of Health

J. W. Shackelford, M.D.

Oklahoma State Hospital Association

Cleveland Rodgers[†]

Oklahoma State Nurse's Association

Nan H. Green, R.N.

Oklahoma State Pharmaceutical Association

Jerry B. Sheen

Oklahoma State Osteopathic Association

Eugene Ross, D.O.

EDITOR'S NOTE

The following report of the Oklahoma Poison Information Center, University of Oklahoma Medical Center, Oklahoma City, Oklahoma, is from April 16, 1956 through June 30, 1957.

Physicians desiring to contact the Poison Information Center should call RE 6-1511.

Oklahoma State Crime Bureau
Ray Page

University of Oklahoma Medical Center
H. A. Shoemaker, Ph.D.
T. R. Pfundt, M.D.

Funds for operation of the Center are provided by the Children's Bureau of the U. S. Department of Health, Education, and Welfare, through the Oklahoma State Department of Health. Office space and utilities are provided by the University of Oklahoma Medical Center. Air conditioning has been installed in the offices through the cooperation of the Department of Pharmacology and the Medical Center.

The Oklahoma Society for Crippled Children has provided funds to assist in defraying expenses of telephone calls by physicians

taking care of indigent patients and other expenses in connection with programs to promote safety education.

The Director attended two meetings in connection with plans to organize a National Clearing House for Poison Information: One in Atlantic City, N. J., and one in New York City. Another meeting is scheduled for October 7, 1957, in Chicago, Illinois, during the annual meeting of the American Academy of Pediatrics. At this meeting there will be reports of two committees: The Committee which was to explore and draw up rules and regulations for a voluntary association of Poison Control Center Directors; and the committee to develop uniform procedures and liaison arrangements with the National Clearing House.

A total of 3,934 letters have been mailed to manufacturers and distributors of products which might be potentially harmful if inhaled or ingested. Approximately 600 replies have been received to date.

An indexed file of approximately 6,000 cards, giving composition of preparations has been prepared. When completed, each card will have on it the symptoms that can be expected from that particular preparation and suggested treatment. In addition, the reference material available in the offices of the Center will permit the giving of information of approximately 25,000 different preparations.

CLASSIFICATION OF ITEMS ABOUT WHICH CALLS WERE RECEIVED

April 16, 1956, through June 30, 1957

ANTIFREEZE	2	2
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COSMETICS

Deodorants	3	
Hair Curling Preparations	2	
Hair Dyes & Tints	5	
Nail Polish and Removers	3	
Shampoos	1	
Other	19	
TOTAL		33

EXTERNAL MEDICINE

Alcohols	3	
Antiseptics	6	
Liniments	2	
Other	16	
TOTAL		27

FOOD POISONING	2	2
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GASES & VAPORS	6	6
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HOUSEHOLD PREPARATIONS

Bleach	7	
Cleaning Fluid	18	
Detergents	10	
Disinfectants	11	
Furniture and Floor Polish	11	
Metal Cleaners	4	
Toilet Bowl and Drain Cleaners		
Acid	2	
Lye	4	
Other	13	
TOTAL		80

INTERNAL MEDICINE

Antihistamines	3	
Aspirin and Salicylates	4	
Cathartics	2	
Cough Medicine	2	
Soporifics	9	
Stimulants	5	
Tranquilizers	12	
Other	18	
TOTAL		55

METALS

Copper	1	
Iron	4	
Lead	1	
Other	3	
TOTAL		9

OTHER	27	27
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PAINT AND VARNISH PRODUCTS

Paint	3	
Paint and Varnish Removers	3	
Paint Thinner	1	
Turpentine	3	
TOTAL		10

PESTICIDES

Fungicides	3	
Insect Repellants	5	
Insecticides	38	
Rodenticides	18	
Other	2	
TOTAL		66

PETROLEUM PRODUCTS

Gasoline	2	
Kerosene	4	
Naptha	1	
Other	1	
TOTAL		8

PLANTS, FRUITS, AND SEEDS	14	14
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UNKNOWN	3	3
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GRAND TOTAL		342
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SUBSTANCES ABOUT WHICH CALLS OR REPORTS HAVE BEEN RECEIVED

Abano Bath Oil	Cigarettes	Household Ammonia
Acetylsalicylic acid	Clorox	Hydrofluoric Acid
Air-Wick	Codeine in Histadyl E. C. Syrup	Inflammable Glue
Alcohol	Colored Chalk (pink)	Ink
Altepose	Colgate's Toothpaste	Insecticide (Lead Arsenate)
Aluminum salts	Colored X-Mas Candle	Insecticide (Pyrethrins, Terpene, Polychlorinates, Piperonyl Butoxide)
Amphetamine	Comet Cleanser	6-12 Insect Repellant
Anacin Tablets	Console Cough Syrup	6-12 Insect Repellant Stick
Anahist	Copper Sulfate	Isopropyl Alcohol
Arsenate of Lead	Coricidin	Jewel Tea Company Spray Deodorant
Arsenic Trioxide	Corn Whiskey	Jimson Weed Seeds
L 10 Arsenical Defoliation	Cowley's Rat & Mouse Poison	Johnson's Kitchen Wax
555 Liquid Rat & Ant Poison (Arsenic)	Crepe paper	Johnson's Pride Furniture Polish
Avon Astringent	D-Con	Joy
Avon Cologne	DDT	Kerosene
Avon Deodorant	Deodorant Cologne	Larvex Moth Proof
Avon Smoker's Toothpaste	Detergent	Laundry Cleaning Fluid
Baby Aspirin	Dexedrine	Lighter Fluid
Barbiturate (Tuinal)	Diamox	Liquid Rat Poison
Barbolite	Diaperene Lotion	Lye
Belladonna & Alum Suppositories	Dieldrin Insecticide Spray	Lysol
Benzedrine	Dilantin Sodium	Mareline
Benzene Hexachloride	Dinitrotoluene	Marshall's Photo Oil Colors
Benzene Hexachloride Insecticide	Diphtheria & Tetanus Toxoids	Mennen's Skin Magic
Berlour Moth Spray	Doriden	Meratran
Bird of Paradise Seeds	Dormison & Triiodinine	Mercuric Chloride
Black Flag Disinfectant	Drano	Mercury
Black Flag Insect Spray	Dyanshine Shoe Polish	Methyl Blue
Black Nightshade	Easy-off Oven Cleaner	Methyl Ethyl Ketone Peroxide
Bleach (Sodium Hypochlorite)	Echols Kingstex (Thallium)	Mi-Cebrin Multivitamin
Bluing	Elephant Ear	Mimosa Seeds
Boric Acid	Elixir Phenobarbital	Moth Ball
Boxer's Liquid Plastic Cement	Emulsion of Benzyl Benzoate & Lindane	Mrs. Stewart's Liquid Bluing
Bromides c Scopolamine	Embossit Ink	Mum
Bruce's Cleaning Wax	Energine	Mushroom
Bruce's Floor Wax	Ephedrine	Nail Polish Remover (Acetone)
Bubble bath capsule	Equanil	Naptha
Bubble light fluid	Ethyl Hexanediol	Natural Gas
CDX-75-25 (GE)	Ex-Lax	N, Butyl Chloride
Calamine Lotion	Ferrous Sulfate	Nestle Baby Hair Treatment
Calgonite	Fly Bait (Parathion)	Nestle Cold Wave for Children
Camolient Lotion	Fluid from Household Thermometer	Nestle's Color Rinse
Campho-phenique	Food Coloring (Propylene Glycol)	Nestle's Hair Remover
Camphor	Food Poisoning	"No Bugs My Lady" Shelf Paper (Lindane)
Camphorated Oil	Frenquel	No-Doz Tablets
Carbena Soapless Rug Cleaner	Frenquel and Sparine	Noreen Hair Color
Carbena Cleaning Fluid	Fuller's Floor Polish	O'Cedar Furniture Polish
Carbon Monoxide	Fuller's Furniture Polish	Oil of Cedar
Carbon Tetrachloride	Furniture Polish	Old English Furniture Polish
Carbon Tetrachloride, Ethylene Dichloride, Ethylene Dibromide	Gasoline	Old English Scratch Remover
Caroid & Bile Salts	Germozene	Old Southern Paint Remover
Carter's Little Liver Pills	Gleem Liquid Wax	Ophthalmic Ointment (Yellow Oxide of Mercury)
Charcofyre	Golden Wax Dry Cleaner	Otodyne
Chicken Feed	Granules Ant Poison (Chlordane)	Paco Varnish Remover
Chlordane Spray	Green Lizard Lotion	Paint (Yellow)
Chlorine Gas	Hand Lotion (Hexachlorophene)	Parathion
"Chlorine" DDT Insecticide	Hand's Teething Lotion (Bromide & Alcohol)	
Chlorine Neutralizer	Helena Rubinstein Cleansing Lotion	
Chromium Metal Cleaner	Histadyl Syrup	

Paregoric	Rhinitis Tablets	Sweeney's Poison Wheat
Paste Rat Poison	Rit Red	Tablets Phenobarbital & Belladonna
Pathilon with Phenobarbital	Roach Cone	Tandrotine
Pentachlorophenol	5-5-5 (Roach Poison, Chlordane)	Tat Ant Trap
Perchloroethylene	Roux Hair Dye	Teak Cough Syrup
Pepto Bismol	Rubbing Alcohol	Tetrachlorethylene
Phenergan	Rough on Rats (Arsenic & Barium Carbonate)	Thiominol
Phenobarbital	Roger's Pipe Braicer	Thorazine
Phenobarbital & Belladonna	Samae Copper Cleaner	Thum
Phenobarbital & Dilatin	Sani Flush	Thyroid
Phenurone	Sargent Worm Capsules	Tide (Detergent)
Pine Oil	Screw Worm Remedy	Tire Dressing
Pine Sol	Seconal	Toxaphene
Pipe Cleaner	Selsun	Turpentine
Plastic Bullet	Serpasil	Turttox Plastic (Methyl Methacrylate)
Poison Ivy	Silver Cleaner	Tyzine Nose Drops
Poke Berries	Skrip Ink	Tyzine Pediatric Solution
Pond's Hand Lotion	Sodium Chlorate	Un X ld Insect Repellent
Potassium Iodide	Sodium Cyanide	Vaginal Suppository (Phenylmercuric Acetate)
Potassium Permanganate Tablets	Sodium Dimethyl Dithiocarbamate	Vaporette
Purex	Sodium Fluoride	Varnish
Pyridium	Sominex Tablets	Warfarin
Raid House & Garden Bug Killer	Spic and Span	Washing Soda (Sodium Carbonate)
Rat Killer (Warfarin)	Stanley Furniture Creme	Watkin's Cold tablets
Raudixin (Hypotensive Agent)	Strepeeze Paint Remover	Watkin's Liniment (Camphor)
Real Kill Bug Killer	Strychnine	No. 135 Western Targets
Red Water Color Paint	Succinyl Choline Chloride	Windex
Renuzit (Cleaning Fluid)	Super-Tex (Toluene)	White Shinola Shoe Polish
Reserpine	Superanahist tablets	Wizard Pink Wick Deodorizer
Resinol	Surfadyl	Zerex Antifreeze
Revlon's Cuticle Remover		Zinc Fumes
Revlon's Nail Polish		

TELEPHONE CALLS						REPORTS BY MAIL			
April 16, 1956 through June 30, 1957						Adult Child			
	Adult	Child	Animal	Request for Information	Totals	Letter with report card not sent to physicians until June 28, 1956			
April	3	2			5	April, 1956			
May		7			7	May			
June	3	7			10	June	2	5	
July	13	19		1	33	July	11	16	
August	9	18			27	August	3	7	
September	2	17	1		20	September	6	26	
October	5	19			24	October	3	17	
November	5	18	1		24	November	0	4	
December	12	25		2	39	December	0	4	
January	6	19			25	March, 1957	0	3	
February	5	18			23	June	0	1	
March	1	17	4		22	TOTAL	25	83	
April	4	21		1	26				
May	7	23			30	GRAND TOTALS	103	336	
June	3	23		1	27	Less Duplicates	4	7	
TOTAL	78	253	6	5	342	TOTAL	99	329	
									TOTAL 428

ACTIVITIES OF OKLAHOMA POISON INFORMATION CENTER

EXHIBIT OF ACCIDENTAL POISONING

May 6-10, 1956

Oklahoma State Medical Association
Oklahoma City, Oklahoma

August 6-9, 1956

Farm-Home Health Conference
Oklahoma State University
Stillwater, Oklahoma

October 4-5, 1956

Oklahoma State Nurses' Association
Oklahoma City, Oklahoma

November 7-10, 1956

Oklahoma State Osteopathic Association
Oklahoma City, Oklahoma

THE OKLAHOMA POISON INFORMATION CEN- TER AND PREVENTION OF ACCIDENTAL POIS- ONING

May 15, 1956

El Reno Lion's Club

November 26, 1957

Wellston Lion's Club

January 10, 1957

Pawnee Lion's Club

January 24, 1957

Wellston Civil Defense Group

February 1, 1957

Farm Women's Club
Meridian, Oklahoma

February 10, 1957

Oklahoma Academy of Pediatrics
Tulsa, Oklahoma

February 15, 1957

Culbertson P.T.A.
Oklahoma City, Oklahoma

February 22, 1957

Deaconess Hospital Staff Meeting
Oklahoma City

June 12, 1957

Kiwanis Club
Britton, Oklahoma

ACCIDENTAL POISONING

July 20, 1956

Farm Home Health Conference
Langston University
Langston, Oklahoma

POISONS I HAVE MET

February 29, 1956

Postgraduate Pediatric Conference
University of Oklahoma School of Medicine
Oklahoma City, Oklahoma

TOXICOLOGY

August 16, 1956

Tinker Field Hospital Staff Meeting

October 11, 1956

University of Oklahoma
Norman, Oklahoma

GENERAL ASPECTS OF POISONS

May 16, 1956

Southwestern Homicide Seminar
University of Oklahoma School of Medicine
Oklahoma City, Oklahoma

POISONS FROM THE STANDPOINT OF NURSES

March 7, 1957

In Service Class for Nurses
University Hospitals

March 19, 1957

Practical Nurses of Logan County
Benedictine Heights Hospital
Guthrie, Oklahoma

POISONOUS PLANTS

March 21, 1957

Sorosis Club Garden Flower Group
Oklahoma City

TOXICOLOGY OF INSECTICIDES

March 12, 1957

Western Division of Oklahoma Pesticide Associa-
tion
Oklahoma City, Oklahoma

POISON CONTROL IN PEST CONTROL INDUSTRY

January 22, 1957

Seventh Annual Pest Control Operators' Conference
Oklahoma State University
Stillwater, Oklahoma

THE POISON INFORMATION CENTER AS AN AID TO THE PRACTICING PHYSICIAN

March 7, 1956

Oklahoma State Medical Association
Oklahoma City, Oklahoma

TV AND RADIO PROGRAMS

May 13, 1956—KOTV—Tulsa, Oklahoma

December 27, 1956—ACCIDENTS IN CHILDHOOD
22 radio stations in Oklahoma

March 31, 1957—"THE OPEN WINDOW"

WKY-TV—Oklahoma City, Oklahoma

June 30, 1957—"Bruce Palmer Reports"

KWTV—Oklahoma City, Oklahoma

Several items on TV and Radio newscasts

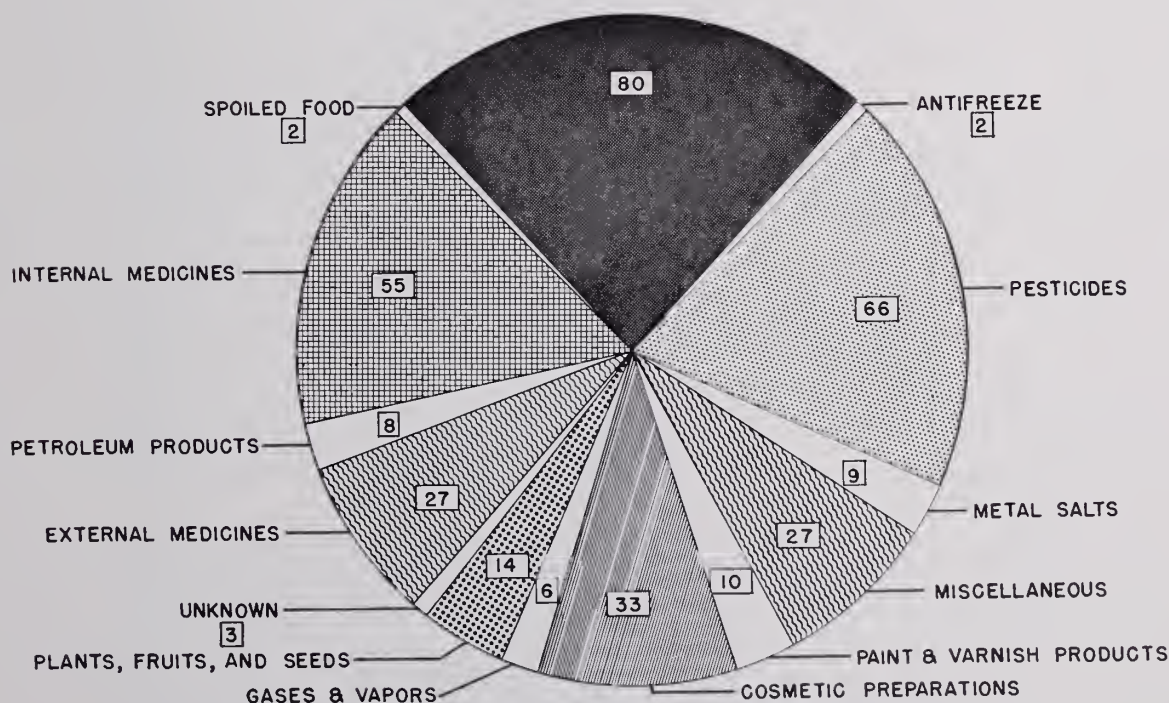
Several items dealing with the activities of the
Center in newspapers of the State.

REFERENCES AVAILABLE FROM OKLAHOMA POISON INFORMATION

American Academy of Pediatrics: *Accidental Poisoning in Childhood*
 American Conference of Governmental Industrial Hygienists: *Trade Names Index*
 A. P. I. Reviews
 Bailey, L. H.: *The Standard Cyclopedia of Horticulture*
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 Chemical Hazards Information Series
 DeOng: *The Chemistry and Uses of Insecticides*
 DeSanctis, A. G. and Varga, C.: *Handbook of Poisoning*
 Dreisbach, Robert H.: *Handbook of Poisoning*
 Drill, Victory A.: *Pharmacology in Medicine*
 Feinberg, Malkel and Feinberg: *The Antihistamines*
 Flint, Thos.: *Emergency Treatment and Management*
 Frear, D. E. H.: *Chemistry of Insecticides, Fungicides and Herbicides*
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 Gonzales, Vance, Helpner and Umberger: *Legal Medicine, Pathology and Toxicology*
 Goodman and Gilman: *The Pharmacological Basis of Therapeutics*
 Gradwohl: *Legal Medicine*
 Kaye, Sidney: *Handbook of Emergency Toxicology*
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 Mac Bryde: *Signs and Symptoms*
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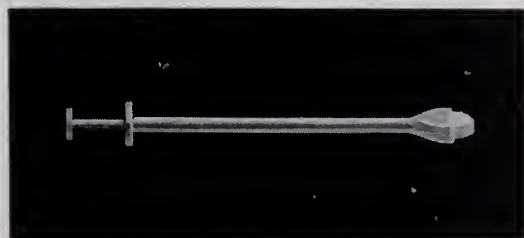
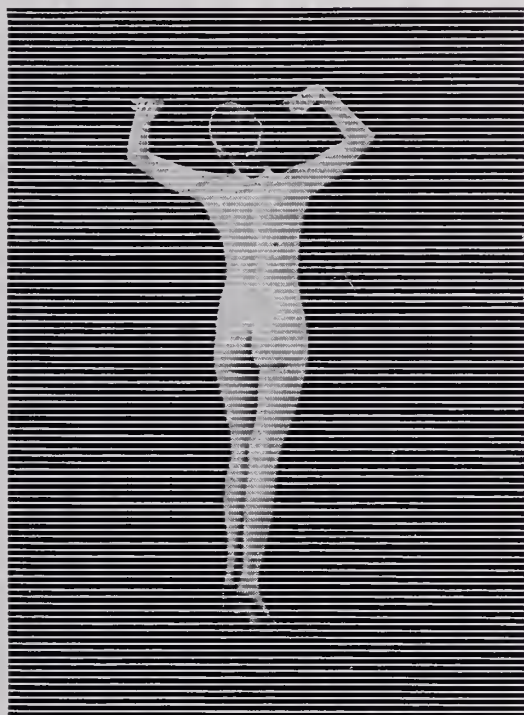
HOUSEHOLD PREPARATIONS



TELEPHONE CALLS ABOUT SUBSTANCES INGESTED OR INHALED
 OKLAHOMA POISON INFORMATION CENTER
 APRIL 16, 1956 - JUNE 30, 1957

Floraquin®

Destroys Vaginal Parasites Protects Vaginal Mucosa



Vaginal discharge is one of the most common and most troublesome complaints met in practice. Trichomoniasis and monilial vaginitis, by far the most common causes of leukorrhea, are often the most difficult to control. Unless the normal acid secretions are restored and the protective Döderlein bacilli return, the infection usually persists.

Through the direct chemotherapeutic action of its Diodoquin® (diiodohydroxyquin, U.S.P.) content, Floraquin effectively eliminates both trichomonal and monilial infections. Floraquin also contains boric acid and dextrose to restore the physiologic acid pH and provide nutriment which favors regrowth of the normal flora.

Method of Use

The following therapeutic procedure is suggested: One or two tablets are inserted by the patient each night and each morning; treatment is continued for four to eight weeks.

Intravaginal Applicator for Improved Treatment of Vaginitis

This smooth, unbreakable, plastic device is designed for simplified vaginal insertion of Floraquin tablets by the patient. It places tablets in the fornices and thus assures coating of the entire vaginal mucosa as the tablets disintegrate.

A Floraquin applicator is supplied with each box of 50 tablets. G. D. Searle & Co., Chicago 80, Illinois. Research in the Service of Medicine.

SEARLE

PRESIDENT'S LETTER



Another December has arrived. With it comes the celebration of Christ's birthday. I know of no profession, unless it be the clergy, which is so constantly aware of the everlasting influences that this Man's life has upon our patients' daily existence.

We physicians see him reincarnated in every new born babe; we see his influence in the devotion of parents for their children; we see the stricken mother exhibit strength and fortitude far beyond her physical being; we see that totally damaged heart beat on and on, and we know it beats only because of a determination that will not give up; we see that pain racked patient smile with an expression of understanding that is not of this world; we see that hopeless injured person come out of a coma and be restored to an active life; we see the peace of mind and the tranquility of spirit that is manifested in those that have consecrated themselves to the service of others; and lastly we see those departures from this life that are constantly reminding us of the beauty and solace of their actions, as they calmly pick up their robes and walk away not as a "chastened galley slave," but with an assurance that could only be divine.

So this December may we as physicians be more mindful of our obligations and endeavor to carry on in our profession as servants and not unmindful of a power greater than ourselves.

John Fleck Burton, M.D.
President

U.S. Agencies Warn of Misleading Claims for Flu Drugs

Two U.S. agencies, the Federal Trade Commission and the Food and Drug Administration, jointly warn drug manufacturers against using "false or misleading claims that their drug products are effective in preventing or treating Asian influenza." The FDA statement said that inoculation "is the only reliable means of preventing influenza," and that diagnosis and treatment of more serious complications "are matters requiring the attention of a physician."

In its weekly report on flu statistics, Public Health Service says there has been no marked change from the previous week. While more schools are being infected, some declines in flu absences are noted. There have been continued increases in industrial absences, but in most cases the increases have not been large. Deaths from all causes in large cities rose 6% and from influenza and pneumonia 28%, but New York City appears to have reached its peak, although deaths still exceed those of last year. Since September 1, there have been 6,438 more deaths from all causes in 114 cities than in the same period last year, with influenza and pneumonia deaths exceeding last year's total for the two months by 1,187. Estimated death rate from influenza and pneumonia in the cities is more than two and one-half times that for the same week last year.

Statement by the Food and Drug Administration: "The Food and Drug Administration will take prompt action against any false and misleading claims by medicine manufacturers that products of limited benefit can effectively prevent or cure Asian flu or its complications. Such claims are contrary to the federal law and the public interest . . . years of extensive research . . .

have shown inoculation with vaccine is the only reliable means of preventing influenza. The diagnosis of Asian flu and particularly the treatment of more serious complications are matters requiring the attention of a physician. Some drug preparations will relieve some of the discomforts of influenza, and these have a proper place in treating the patient. But aside from the vaccine there are no drugs available to prevent this disease. The public should be on guard against unwarranted claims for Asian flu medicines and should seek the advice of a physician for proper and safe means of prevention and treatment of the disease . . . "

Statement by Federal Trade Commission: "It is the duty of the Commission to stop false and misleading advertising . . . The Commission will proceed against any person or corporation who attempts to associate his product with a disease it cannot prevent, alleviate, nor cure . . . The Commission is actively checking all media of advertising and will move promptly to eliminate any claims that are false or misleading. It will be guided by the best medical opinion available."

SOCIAL SECURITY SAYS: "A wife or widow under 62 or the divorced wife of an insured person may receive payments only while she has in her care a child (under 18 years of age) who is entitled to monthly payments."

In Other Words: Many widows who married in their 20's and lost their husbands in their 40's, would not receive any survivors' benefits until they reached age 62 because their children would be 18 or older.

—Prepared by the A.M.A.

Advisory Committee on Biology and Medicine Justifies Weapons Tests

A six-man Advisory Committee on Biology and Medicine has informed the Atomic Energy Commission that necessary tests of thermonuclear weapons are justified despite radiation hazards. The group thus sides with the AEC in a debate that has been the subject of lengthy congressional hearings and is expected to continue in the next session. Comments the group: "... if we wish to maintain a first class military organization for the safety of the country, we must at least keep abreast of new weapons development"

The committee concedes, however, that tests must be kept within reasonable bounds, particularly when more nations decide to conduct their own tests. "In time the situation may well become serious . . . The question arises in the minds of many thoughtful persons whether the number and power of bombs exploded in tests are being kept at the minimum consistent with scientific and military requirements."

The committee made some estimate of maximum damage to be expected from the annual detonation of atomic explosives equal to the average of all tests held in the last five years. They include: Leukemia, an increase of 160 deaths and possibly another 36 deaths over current rate of 11,400; birth of handicapped children, an increase of from 160 to 800 above the present rate of 80,000 a year in the U.S.; shortening of life, a few days at the worst; bone cancer, possibly no effects at all in a lifetime.

E. H. SHULLER, M.D., McAlester was recently appointed to the Board of Trustees of the College of the Ozarks, Clarkeville, Arkansas. Doctor Shuller came to Oklahoma from Arkansas and has practiced in McAlester since 1931.

* CHARLES ED WHITE, M.D., recently moved from Muskogee to Sulphur where he will be Supervisor of the Medical Department of the Veterans Administration Hospital.

A.M.A. Plans Industrial Health Congress in Milwaukee

Maintaining high standards of health in industry will be a principal topic of consideration at the 18th annual Congress on Industrial Health to be held January 27-29 at the Schroeder Hotel in Milwaukee. Physicians, nurses, industrial hygienists, engineers and others interested in the field will attend the meeting sponsored by the A.M.A.'s Council on Industrial Health.

Recent developments in industrial health programs and various aspects of immunization programs in industry will be among the subjects covered by panelists at a special session co-sponsored by chairmen of state medical society committees on industrial health. Other features include three technical sessions on—(1) general aspects of disability evaluation; (2) industrial dermatitis, causes and evaluation of disability; (3) low back pain, cause, treatment, evaluation of disability, rehabilitation.

A.M.A. Plans Two "Nomenclature" Institutes in 1958

So popular have the Nomenclature Institutes been that the American Medical Association again plans to sponsor two more of these short courses during 1958. The first will be conducted March 31 to April 2 at Tulsa, Oklahoma. The second will be held in July in Boston. These three-day meetings are planned by the A.M.A. as a special service to medical record librarians and others working with the *Standard Nomenclature of Diseases and Operations* in the hospital, clinic or doctor's office. Lectures are to be given by Edward T. Thompson, M.D., Nomenclature Editor, and chief, intermural research activities, division of hospital facilities, USPHS, Washington, D.C., and Adaline C. Hayden, C.R.L., Nomenclature Associate Editor. Queries should be sent to the A.M.A.

'Medical Society Opposes Rise in Blue Cross Rates'

The heading on a story, "Medical Society Opposes Rise in Blue Cross Rates," which appeared in the Philadelphia Evening Bulletin recently, set off a publicity chain reaction that has already reached New York. The Times there carried a story October 23 which was headlined: "City Opens Fight On Blue Cross Bid."

The Philadelphia story said in part:

The Philadelphia County Medical Society today (October 14) joined the CIO Industrial Union Council in opposing any rise in Blue Cross rates.

The increases, first made public yesterday (October 13), would raise the cost of Blue Cross hospitalization coverage from 42 to 71 per cent in various categories.

In the same story, Samuel B. Hadden, M.D., president of the Philadelphia County Society, was quoted as saying:

"Any increase will price Blue Cross beyond the ability of the individuals who need it most. We feel that the principal reason why Blue Cross is in its present difficulties is that it is trying to give complete and total health coverage, which is not the function of Blue Cross."

In an accompanying editorial in the same newspaper, Doctor Hadden was quoted as saying that Blue Cross has become "almost like a blank check for the hospitals."

The closing paragraph of the editorial said:

Though this is only one phase of the inflation problem, it affects more than 50,000,000 Americans, including about two-thirds of the families in Philadelphia. Other increases in living costs have come by degrees. It is the misfortune of Blue Cross that it is compelled to ask such a formidable increase at a time when the average subscriber feels that he can stand no more.

The Pennsylvania State Insurance Commission has scheduled hearings on the rate increase for this month.

The New York State Insurance Department has also set hearings for November 18. Said the New York Times:

City Comptroller Lawrence E. Gerosa opened a fight yesterday, October 22, on the 40 per cent premium increase sought by the Blue Cross insurance plan for paying part of hospital bills.

National Institutes of Health Allocates Medical Research Grants

National Institutes of Health has allocated \$46 million in research grants, or 46% of the \$99 million appropriated for the fiscal year ending next June 30. A total of 478 non-federal institutions share in the 3,325 grants, with more than two-thirds of the money going as continuation grants or supplements and the remainder for new projects.

Totals by institutes: Cancer, 384 grants for \$5.9 million; heart, 642 grants for \$9.6 million; allergy and infectious diseases, 620 grants for \$7.6 million; arthritis and metabolic diseases, 579 grants for \$7.1 million; dental, 105 grants for \$968,000; mental health, 189 grants for \$3.9 million; neurological diseases and blindness, 357 grants for \$4.7 million; general, 449 grants for \$5.9 million.

A.A.G.P. To Hold Tenth Annual Meeting

The Tenth Annual Meeting of the American Academy of General Practice will be held in Tulsa, Oklahoma, February 3-4, 1958.

Earl Lusk, M.D., Tulsa, is Program Chairman and Marshal Hart, M.D., Tulsa is Publicity Chairman for the meeting which has been planned to be of interest to both doctors and their wives.

The guest speakers will include: Richard H. Shepard, M.D., Assistant Professor of Medicine, Johns Hopkins Hospital; Paul Laybourne, M.D., Child Psychiatrist, Kansas City; Benjamin H. Robins, M.D., Anesthesiologist, Vanderbilt University; A. C. Curtis, M.D., Dermatologist, Ann Arbor, Michigan; Michael DeBakey, M.D., Cardiovascular Surgeon, Houston.

The Times said that Mayor Wagner wanted the increase proposal studied since the boost would effect a large number of city employees. In this respect the mayor's office estimated that the increase would cost the city \$1,000,000 a year.

Coming Meetings

HILLCREST MEDICAL CENTER 1653 East 12th St., Tulsa, Okla.

Lectures in Basic Science Given by Faculty Members of the University of Oklahoma School of Medicine.

Dec. 10—Autonomics: Structure and Function, G. H. Daron, Lecturer.

Dec. 17—Central Autonomic Function as related to common medical diseases, C. G. Gunn, Lecturer.

Jan. 14—Sympathetic and Parasympathetic Drugs, P. W. Smith, Lecturer.

Jan. 28—Newer Brain Drugs and their Relation to the Hypothalamus, C. G. Gunn, Lecturer.

Feb. 11—New Sedatives: Narcotics and Narcotic Antagonists, A. A. Hellbaum, Lecturer.

Feb. 25—Common Metabolic Pathways, A. T. Bever, Lecturer.

Mar. 11—Anticoagulants, E. G. Larsen, Lecturer.

Mar. 25—Estrogens and androgens, A. T. Bever, Lecturer.

April 9—Adrenal Steroids; Aldosteronism, R. W. Payne, Lecturer.

April 30—Thyroid: Recent Advances in Diagnosis and Treatment, R. W. Payne, Lecturer.

May 13—Pulmonary Function, M. T. Lategola, Lecturer.

May 27—Basic GI Physiology, J. W. H. Smith, Lecturer.

June 10—Physiological Basis of Liver Function Tests, E. G. Larsen, Lecturer.

June 24—Alimentary Reserve: the malabsorption syndrome, J. W. H. Smith, Lecturer.

Postgraduate Division UNIVERSITY OF OKLAHOMA MEDICAL CENTER SHORT COURSE SERIES

Jan. 8—Pediatrics—Growth Failure.

Feb. 12—Surgery—Urology Symposium and C. B. Taylor Lectureship.

Mar. 12—Medicine—Pathogenesis and Treatment of Anemia.

April 9—Anesthesiology—Anesthesia for the Part-Time Anesthetist.

May 14—Pediatrics—Pediatric Allergy.

June 11—Surgery—Surgical Diagnosis and Problem Clinic.

The courses are designed so physicians may attend four hours of formal instruction in the above fields while spending only one-half day from their office. This series is approved for credit by the Oklahoma Academy of General Practice.

Time 3:30 to 8:30 p.m. the second Wednesday of each month.

Place: Room 120, Medical School Building.

Registration: \$3.50 per session; \$25 for the entire Boston, Mass.

William L. Riker, M.D., Surgeon
Chicago, Ill.

Orvar Swenson, M.D., Surgeon
Boston, Mass.

John W. Hope, M.D., Radiologist
Philadelphia, Pa.

Also a prominent anesthesiologist and pathologist will be obtained for this program.

TRAUMA—April 4 and 5

Sponsored by the Regional Committee on Trauma of the American College of Surgeons

OKLAHOMA ASSOCIATION OF HOUSE STAFF PHYSICIANS—May 23 or June 6

Two guest lecturers and presentation of original papers by members of the various House Staffs will highlight this program. Participating hospitals are: Hillcrest Medical Center, Tulsa; St. John's, Tulsa; McBride, Mercy, St. Anthony, University, Veterans Administration and Wesley, Oklahoma City.

BASIC ELECTROCARDIOGRAPHY—

March 3 through 7

This course consists of informal lecture presentations which assume no formal acquaintance with the subject. Laboratory exercises are carried out by the participants with individual help from the instructors. All working materials are furnished. Participants are expected to attend all lectures and laboratory periods and remains the entire time scheduled.

OPHTHALMOLOGY-OTOLARYNGOLOGY

SYMPOSIUM—March 6 and 7

Sponsored by Oklahoma City Society of Ophthalmology and Otolaryngology

Guest Lecturers:

Joseph H. Haas, M.D., Chicago, Illinois

Herman Semonov, M.D., Beverly Hills, California

OBSTETRICAL-GYNECOLOGICAL SYMPOSIUM—

March 8

Sponsored by the Oklahoma City Obstetrical and Gynecological Society. There will be two prominent guest lecturers.

PEDIATRIC SURGERY, RADIOLOGY,

PATHOLOGY—March 14 and 15

Fourth Annual Combined Symposium

Sponsored by Oklahoma Association of Pathologists, Oklahoma Association of Radiologists, Oklahoma Chapter, American College of Surgeons

Guest Lecturer:

Robert E. Gross, M.D., Surgeon

AMERICAN COLLEGE OF SURGEONS

Sectional Meeting

Statler Hilton Hotel Dallas, Texas

JANUARY 9-11, 1958

Dr. Frank H. Kidd, Jr., and a Committee of Dallas Surgeons have planned a well-balanced program of interest to general surgeons as well as surgical specialists. Subjects range from Chemopallidectomy for Parkinson's Disease to Bomb Phenomenology.

All members of the medical profession are invited to attend.

Sectional meetings of the American College of Surgeons draw on surgeons of outstanding ability to discuss problems encountered in daily practice, and to disseminate information about new techniques. usefulness is the keynote to all College programs, which are planned by local committees answering the needs of doctors within the meeting area. Panels, symposia, papers, medical motion pictures, and question and answer periods characterize the meetings.

Two new features are scheduled for each Sectional Meeting this year: a Fellowship Luncheon, at which a panel of College officials will answer questions about the entire program of College activities, and in turn, pose questions to the audience; and a social, rather than scientific, dinner meeting to which program participants, visiting surgeons, wives and other guests are cordially invited for an informal and pleasant evening of entertainment.

UNIVERSITY OF KANSAS SCHOOL OF MEDICINE

University of Kansas Medical Center

Kansas City, Kansas

Pulmonary Disease Clinic

January 13-14, 1958

Clinical facilities of two major hospitals will be used in the presentation of the Pulmonary Disease Clinic. The Monday program is offered at the University of Kansas Medical Center, and the Tuesday sessions are scheduled at the Kansas City Veterans Administration Hospital.

Registration fee is \$30.00.

13th Annual Postgraduate Course in Gastroenterology

January 15-16, 1958

Patient material of representative problems will be presented and will constitute an important part of the program. The informal symposium and panel method of teaching will be utilized. The panels include surgeons as well as internists for comprehensive coverage of selected gastro-intestinal problems.

13th Annual Postgraduate Course in Surgery

January 20, 21, 22, and 23, 1958

The four day Course in Surgery has been designed to interest not only the general surgeon and the surgical specialist, but also the general practitioner who includes surgery in his practice. Treatment of Accidentally Incurred Injuries, Changing Concepts of Surgical Treatment, Surgical Management of Cancer, and Gastrointestinal Bleeding are general considerations for the program.

The registration fee is \$60.00.

Further information concerning details of the courses, fees, registration, etc., may be obtained by writing the Department of Kansas School of Medicine, Kansas City 12, Kansas.

GENERAL PRACTICE REVIEW

JANUARY 13-18, 1958

Denver, Colorado

An annual postgraduate course designed especially for the General Practitioner will be held January 13-18, 1958 at the University of Colorado Medical Center in Denver, Colorado.

Monday	Medicine
Tuesday	Pediatrics
Wednesday	Surgery
Thursday	Laboratory Medicine and Radiology
Friday	Obstetrics and Gynecology
Saturday	Trauma

Registration may be for the entire six days, or for any selected days. For further information write the office of Postgraduate Medical Education, The University of Colorado Medical Center, 4200 E. Ninth Avenue, Denver 20, Colorado.

First Oklahoma Colloquy on

ADVANCES IN MEDICINE

February 6, 7, and 8, 1958

The first Oklahoma Colloquy on Advances in Medicine will be held February 6, 7, and 8, 1958. The meeting will be devoted to problems on Fluid, Electrolyte and Nutritional Balance and is under joint sponsorship of the Department of Medicine, University of Oklahoma, Division of Postgraduate Education, University of Oklahoma and the Baxter Laboratories.

Eight nationally prominent investigators in this field will participate and present the results of original work from their laboratories. Among the guest speakers will be Dr. Curtis Artz, Associate Professor of Surgery, University of Mississippi; Dr. Ronald Cooke, Chairman, Department of Pediatrics, Johns Hopkins School of Medicine; and Dr. J. Russell Elkin-ton, Associate Professor of Medicine, University of Pennsylvania.

Oklahoma Colloquy on Advances in Medicine To Be Held February 6, 7, 8

The First Oklahoma Colloquy on Advances in Medicine is to be held February 6, 7, and 8 in the Auditorium of the University of Oklahoma School of Medicine.

Morning sessions will begin at 8:45 a.m. and afternoon sessions will start at 2:00 p.m.

The following program has been planned by the Department of Medicine and Postgraduate Division, University of Oklahoma School of Medicine and Hospitals: The Practice of Fluid Therapy, Robert Tarail, M.D.; The Recognition and Management of Fluid and Electrolyte Alterations in Surgical Patients, William E. Abbott, M.D.; Fluid and Electrolyte Therapy in Burns, Curtis Artz, M.D.; The Role of Mesenchymal Ground Substance in Water and Electrolyte Metabolism, John H. Bland, M.D.; Central Nervous System Factors in the Regulation of Water and Electrolyte Metabolism, John H. Bland, M.D.; Stress: Its Effect on Fluid and Electrolyte Metabolism, W. W. Schottstaedt, M.D.; The Problem of Water Intoxication in Pediatrics and Surgery, Robert E. Cooke, M.D.; Present Status of Vitamin B6 in Human Metabolism, John F. Mueller, M.D.; Metabolic Response to Injury, Curtis Artz, M.D.; Physiological Observations in Intravenous Fat Emulsions, John F. Mueller, M.D.; The Use of Fat Emulsion, Alcohol and Protein Hydrolysates in Surgical Patients, William E. Abbott, M.D.

Experimental Studies in Potassium Metabolism, Robert E. Cooke, M.D.; The Relation of Potassium Depletion to Kidney Structure and Function, Arnold S. Relman, M.D.; The Cousins of Potassium, Robert Tarail, M.D.; The Problem of Hyperkalemia and Hypokalemia, Ben I. Heller, M.D.; Newer Concepts in the Renal Regulation of Acid-Base Balance, Arnold S. Relman, M.D.; Acute Renal Failure, Ben I. Heller, M.D.; Current Status of Magnesium Metabolism, William O. Smith, M.D.; Leonard P. Eliel, M.D., and James F. Hammarsten, M.D.; The Regulation of Intake and Disposal of a Carbohydrate Load, Rachmiel Levine, M.D.; Mechanisms of Action of Tolbutamide and

Insulin, Allen R. Hennes, M.D.; The Effect of Steroids on Carbohydrate Metabolism, Kelly M. West, M.D.; The Metabolic Fates of Fructose and Galactose, Rachmiel Levine, M.D.

The guest speakers from out of the state are William E. Abbott, M.D., Associate Professor of Surgery, Western Reserve University, Cleveland, Ohio; Curtis Artz, M.D., Associate Professor of Surgery, University of Mississippi, Jackson, Mississippi; John H. Bland, M.D., Professor of Medicine, University of Vermont Medical School, Burlington, Vermont; Robert E. Cooke, M.D., Professor of Pediatrics, Johns Hopkins School of Medicine, Baltimore, Maryland; Ben I. Heller, M.D., Professor of Medicine, University of Arkansas, Little Rock, Arkansas; Rachmiel Levine, M.D., Chairman, Department of Medicine, Michael Reese Hospital, Chicago, Illinois; John F. Mueller, M.D., Assistant Professor of Medicine, University of Cincinnati, Cincinnati, Ohio; Arnold S. Relman, M.D., Associate Professor of Medicine, Boston University School of Medicine, Boston, Massachusetts; Robert Tarail, M.D., Associate Chief of Medicine, Roswell Park Memorial Institute, Buffalo, New York.

J. L. LeHew, Sr., M.D., Honored For 50 Years of Service

J. L. LeHew, Sr., M.D., Oklahoma's oldest practicing physician, was honored by residents of Pawnee at a special Chamber of Commerce luncheon, October 30.

C. E. Northcutt, M.D., of Ponca City, past President of the Oklahoma State Medical Association, was speaker for the luncheon.

A bronze plaque expressing appreciation of the Pawnee area people for more than a half-century of service, was given to the 89-year-old physician. Presentation was made by John L. Maltsberger, President of the Pawnee Chamber of Commerce.

Doctor LeHew was born in Henry County, Iowa and was graduated from the University Medical College, Kansas City. He opened his offices in Neosho County, Kansas and later moved to Pawnee.

Organization News

FCDA Official Meets With State Medical Officials

In conjunction with the survival planning project, a phase of the state civil defense activities, P. A. Lindquist, M.D., U.S. Public Health representative from the national headquarters of the Federal Civil Defense Administration, Battle Creek, Michigan, met with Oklahoma Medical officials, November 18 at the Oklahoma State Medical Association Headquarters.

The meeting provided Doctor Lindquist an opportunity to meet medical leaders of the state and Oklahoma county who are concerned with civil defense planning, said Tom Brett, Oklahoma Civil Defense Director.

The purpose of Doctor Lindquist's appearance was to brief Oklahoma medical leaders regarding the latest concepts of meeting the medical problem which will result from nuclear warfare.

"Nuclear warfare lessens the medical problem and increases the problems of public health and sanitation," remarked Lindquist. He listed the medical treatment phase of civil defense as being in three major categories: (1) Medical care for survivors most readily available to combat existing situations, (2) Childbearing women and women of childbearing age, and (3) Casualties resulting from the attack.

The overall purpose of the medical program is to retain an active force to meet the many pressing problems and to provide the best possible care for casualties.

Lindquist explained that the most recent medical concepts provide for the movement of emergency hospitals to a distance of at least 23 miles beyond the peripheral area of a city which suffers such a nuclear attack. Closer to the heart of the damaged area will be "emergency treatment" centers—for the purpose of providing "emergency treatment" only before the victims are transported to hospitals.

The FCDA medical leaders specifically pointed out that the new civil defense medical concept does not lessen the need for persons trained in first aid and in organized first aid teams. Such groups will be utilized with advance rescue teams and in the emergency treatment centers.

Oklahoma medical leaders attending the briefing included: William H. Reiff, M.D., Chairman of the Civil Defense Committees of both the Oklahoma County Medical Society and the Oklahoma State Medical Association; Phil Johnson, M.D., member Civil Defense Committee, Oklahoma County Medical Society; Jack Shrode, Past President, Oklahoma Hospital Association; Grady F. Mathews, M.D., State Health Commissioner, and his assistant for civil defense planning; George Adams, M.D.; Colonel Lester Porta, Oklahoma survival project staff member; Mr. A. L. Gilbreth, regional civil defense representative, Denton, Texas; and Mr. Brett.

Mr. Brett passed out accolades and gave overwhelming credit to Doctor Reiff for the outstanding work he has accomplished in providing a medical plan for Oklahoma County, and to Doctor Phil Johnson for his participation in civil defense and specifically in the radiological field.

Doctor Reiff pointed out it is well for ready reserve military men to assist in the formation of medical teams; however, it must be borne in mind that they will be included in the military forces when this nation is attacked.

A problem of concern for all, legal liability for the treatment of casualties was discussed briefly. It was agreed that the civil defense chief, Mr. Brett, would present the question to the University of Oklahoma Law School in an effort to free the medical personnel from subsequent lawsuits, after rendering medical assistance during such an emergency.



Tulsa Physicians Honored

H. W. Ford, M.D., (left), Tulsa general practitioner, is shown receiving a 50-Year Club Pin from the Oklahoma State Medical Association. Presentation was made by Wendell L. Smith, M.D., (right), Tulsa Councilor. In the center is John F. Gorrell, M.D., E.E.N.T. Specialist, who was presented with a Certificate of Life Membership in the Oklahoma State Medical Association.

Doctor Ford has practiced in Tulsa since 1917. Doctor Gorrell is semi-retired.



J. T. Riley, M.D., Honored

J. T. Riley, M.D., of El Reno, left, is shown receiving a Fifty Year Pin in honor of his service to the medical profession. The presentation was made by Alpha Johnson, M.D., right, Vice-President of the Oklahoma State Medical Association, at a staff meeting of Park View hospital in El Reno in October.

25 YEARS AGO



Articles published in *The Journal* of the Oklahoma State Medical Association December, 1932.

EDITORIAL

THE DEPRESSION AND THE VETERANS BUREAU

"The Veterans Bureau, which means beneficiaries of it, has lately been singled out as targets, which has brought about a great deal of Federal expenditure.

"It must be remembered that nothing of this was said in 1916, 1917, and 1918. Nothing was too good for the several hundred dollars a month man who went into the trenches for thirty dollars and the writer personally knows of many men who today are on the rocks and have never been able to regain their former economic position. However this is the result of our wars. Ruin inevitably follows in its course, not only to the vanquished but to the victors as well.

"The Federal budget roughly calls for an expenditure as follows:

Public Debt	\$1,136,700,000
Veterans	928,000,000
Administration and all other	678,098,000
Army and Navy	648,300,000
Public Works	538,100,000

"Now it must be observed that the nation's taxpayers cannot meet this. The writer is one who is not in favor of singling out certain men, corporations or organizations to bear the brunt of this. Everyone should pay according to his means. . . .

"The per capita cost of caring for Veteran Bureau patients seems to be much higher than it should and some attempt should be made to lower it. It is the writer's impression that some of our Veteran Bureaus are not conducted so much as hospitals as they are houses of entertainment for the supposedly ill veteran. Another item of waste is the constant re-hospitalization of patients who either want increased compensation or merely a place to stay. Our law makers, feeling the pulse and pressure of the veterans' complaints are largely responsible for this, for after a repeated examination it is not uncommon for senators and representatives, who know nothing whatever of the case, to insist that the man again be re-hospitalized. The writer knows of many such cases. Congress should keep its hands off these things, except where there are obvious grounds for complaint. . . . "



Miami Clinic Holds Open House

An open house held November 10, formerly opened the Miami Clinic Building at 30 B Southwest, Miami, Oklahoma.

The new brick structure has 1,610 square feet of floor space in the basement and 6,524 square feet of floor space in the first floor. The building has a heating and air conditioning system, and complete inter-communication and music system.

Accommodations consist of seven doctors' suites, a dentist's suite, Pharmacy, X-ray and Laboratory, Physio Therapy, E.K.G. and B.M.R. Suites, and Emergency Surgery.

H. B. Stewart, M.D., Elected

H. B. Stewart, M.D., Tulsa anesthesiologist, was elected President of the Oklahoma Blue Cross Plan Board of Trustees to serve the unexpired term of the late Arthur S. Risser, M.D., of Blackwell. An experienced member of the board, Doctor Stewart had served as First Vice-President since 1952.

The action was taken at the semi-annual meeting of the Oklahoma Blue Cross and Blue Shield Boards which was held in Oklahoma City in October.

John E. Highland, M.D., Miami, was elected to membership on the board to fill the vacancy left by Doctor Risser's death.

AN INVITATION TO EXHIBIT OSMA ANNUAL MEETING

Do you have an idea which you would like to present to other physicians in Oklahoma? An unusual case? A series of cases? A new device or technique? An organization problem or plan of action? A piece of experimental work?

If so, consider working it up as a SCIENTIFIC EXHIBIT to be shown at the annual meeting of the Oklahoma State Medical Association in May, 1958.

Start now collecting your material and planning your exhibit. Since space is limited, you are encouraged to submit your application early. Your exhibit need not be large. It should be stimulating. Subjects which have special visual interest are particularly suitable.

May 5, 6, 7
Zebra Room **Municipal Auditorium**
Oklahoma City

Preliminary Application for SCIENTIFIC EXHIBIT SPACE

52nd Annual Meeting
Oklahoma State Medical Association
Oklahoma City, Oklahoma — May 5-7, 1958
(Please type or print)

Name of organization or individual requesting space: _____

Address: _____

Please describe your proposed exhibit in the space below:

(Use separate sheet if necessary)

Amount of space required (width) _____ feet. Please designate width in multiples of eight feet. All booths will be six feet deep.

Deaths

THOMAS MCELROY, M.D.
1892-1957

Thomas McElroy, 64, Ponca City physician since 1929, died October 21, 1957.

Doctor McElroy was born December 28, 1892, in Mingo Junction, Ohio. He graduated from Ohio State University in 1916.

Doctor McElroy was a member of the Oklahoma State Medical Association.

THOMAS J. LYNCH, M.D.
1890-1957

Thomas J. Lynch, M.D., 67, retired physician, died October 29, 1957, at his home in Tulsa.

A graduate of the Jefferson Medical College in Philadelphia, Pennsylvania in 1910, Doctor Lynch came to Oklahoma in 1919, moving to Okmulgee. In 1930, he moved to Tulsa where he practiced until retirement in 1944.

Doctor Lynch was a life member of the Tulsa County Medical Society, a member of the Oklahoma State Medical Association, and the American Medical Association.

FRED AKIN GLASS, M.D.
1887-1957

Fred Akin Glass, M.D., 70, died at his home northeast of Tulsa, October 28, 1957.

Born March 11, 1887 in Travelers Rest, Kentucky, Doctor Glass came to Tulsa, in 1915. He graduated from Johns Hopkins School of Medicine in Baltimore, Maryland in 1912.

Doctor Glass was a member of the Tulsa County Medical Society, the Oklahoma State Medical Association, the American Medical Association and the American College of Surgeons.

JOHN H. HARVEY, M.D.
1888-1957

John H. Harvey, M.D., 69, died at his office in the Heavener hospital, October 11.

Doctor Harvey graduated from Arkansas University in 1911. After residing in Fort Smith, Arkansas, Doctor Harvey came to Heavener in 1929.

Doctor Harvey was a member of the Oklahoma State Medical Association.

Book Review

Care of the Long-Term Patient. Commission on Chronic Illness. Fabric binding, \$8.50. Pp. 606. Copyright 1956. Published by Harvard University, Cambridge, Mass.

This volume is the first published, although designated Volume II, of a four volume series resulting from a seven year study of prolonged illness carried out by the Commission on Chronic Illness. The Commission represented the interest of many voluntary groups, institutions, and agencies concerned with this very complex problem. The material gathered in the studies upon which this volume is based is used to define the subject and then to present its several aspects. The latter is done under the headings of the patient at home, rehabilitation, the patient in an institution, personnel and education, planning, administration, and financing. It provides a very readable and interesting survey of the current picture of care of the long term patient. The deficiencies of the presentation will depend upon the expectations and questions in the mind of the reader who would like a program applicable to a particular situation.

The identification of the *long term patient* is based on a definition of active comprehensive care, and response of the patient's condition, of such complexity and cost as to usually require community help in its provision. The estimated incidence of such instances ranges from 5% under 15 years to 39% over 65 years of age.

The section on "The Patient at Home" emphasizes that, with the necessary community service available (visiting nurses, physical and occupational therapy, social service, etc.) a satisfactory comprehensive home care program can be realized. It is pointed out that the major deficiencies of so called "Home Care" programs developed in medical center settings, is that they and the situation and society in which they operate are frequently not geared to the handling of the problems of long term illness in a constructive and productive way. The guiding role of the physician, whatever his relationship to the patient, grows out of his knowledge, support, and use of all available

means for reconstruction of his patient's health, development, and productivity.

The care of prolonged illness in institutions (general and special hospitals, nursing homes, etc.) is also covered in critical detail. These studies provide the most objective and revealing data on costs, human as well as financial, arising from chronic illness. Institutional care has been deemphasized in proportion as less costly but adequate home care and rehabilitation can be developed. It is pointed out that the form, function, and use of institutions must also alter as the idea of restoration to productivity of self help, and the relative direct and indirect costs of rehabilitation versus permanent invalidism are brought into focus.

The conclusions are well supported, that the fitting of medical, paramedical, home, and institutional care to the natural course of illness as it is being affected by progressive medical science, is not an easy thing. It must progress from all levels, not the least of which are the grass roots of medical and community education. Therefore it also is a long term and continuing proposition.

While reading the volume, one thing emerges more and more clearly from the large amount of material presented. There is in process of development a more extensive concept of patient care, as yet based pretty much on experience in large urban communities. Adaptive thinking will be required to develop it to practical application and usefulness for patients in the many other situations. Tradition, cost, and competition of other community needs, the modern family function and structure, have all been influences to be recognized. A multitude of questions are stated or implied. Most of them deal with "how" rather than "what." Definitive answers are almost wholly left to be worked out by those interested in developing them; which the reviewer feels is as it should be. A series of some 80 suggestions is made at the end of the volume, serving more as a guide than a pattern. The recommendation made by the Commission, that medical and non-medical leaders in the community effect a wise organization to develop, coordinate, and integrate the necessary services, would appear to be basic.—Robert C. Lowe, M.D.

PHYSICIAN PLACEMENT

Internal Medicine

Louis K. McCown, 1516 Third Ave., N.E., Rochester, Minnesota, age 33, married, Tulane, 1949, Residency at Mayo Clinic, Veteran, available January 1, 1958.

Bartis M. Kent, 225 Koser, Iowa City, Iowa, age 32, married, Baylor, 1948. Three year residency at Baylor, veteran, available July, 1958.

General Practice

Jack L. Coats, M.D., 1414-A East 17th Place, Tulsa, Oklahoma, age 29, married, veteran, University of Oklahoma School of medicine 1957, will be available July 1, 1958.

Neurosurgery

Bahif S. Salibi, M.D. (Currently Captain, MC U. S. Army) 121 Evac. Hosp., APO 971, San Francisco, California, age 35, married, Board qualified in Neurosurgery, except for the two years of private practice required by the Boards, available October, 1958.

Thoracic and Cardiovascular Surgery

Wayne E. Hird, M.D., McGuire VA Hospital, Richmond 19, Virginia, age 31, married, Korean veteran, University of Kansas 1950, Board qualified in General Surgery, Thoracic and Cardiovascular exams will be completed by next July. Will be available July, 1958.

Obstetrics & Gynecology

Herbert Claibrone Jones, Jr., Box 166, University Hospital Charlottesville, Virginia, age 30, married,

CLASSIFIED ADS

WANTED: Physician to do general practice and general surgery—to take the place of Dr. J. P. Braun, recently deceased—Hobart, Oklahoma. Well established large practice; modern air conditioned clinic building, hospital facilities. Contact Dr. J. William Finch, Hobart, Oklahoma.

5-TON Westinghouse Air Conditioner property of Association, excellent condition, \$500.00.

WANTED—Your surplus medical equipment. Used equipment of all kinds bought, sold, traded. Microscopes and electro-medical instruments repaired. Let us know your equipment problems. Write TEX-RAY 3305 Bryan St., Dallas 4, Texas.

LOCATION and office space for General Practitioner in Oklahoma City, Oklahoma. Very attractive proposition. No money necessary. For further details, telephone JACKSON 5-2435 or write to Dr. O. N. Copledge, 2112 N. W. 12th Street, Oklahoma City 7, Oklahoma.

University of Virginia 1951, finishing board qualifications, will be available Spring, 1958.

General Surgery

Duane H. Dougherty, M.D., 201 Avon Road, Tonawanda, New York, age 30, married, veteran, New York University 1953, board qualified, will be available July, 1958.

H. N. Hamilton, M.D., 13 Evergreen Road, Little Rock, Arkansas, age 36, married, veteran, The Johns Hopkins, 1945, finishing Orthopedic Residency July 1958 and will be available at that time.

**If You Know Of
Practice Opportunities
Within the State
Please Notify the O.S.M.A.
Giving Complete Details**

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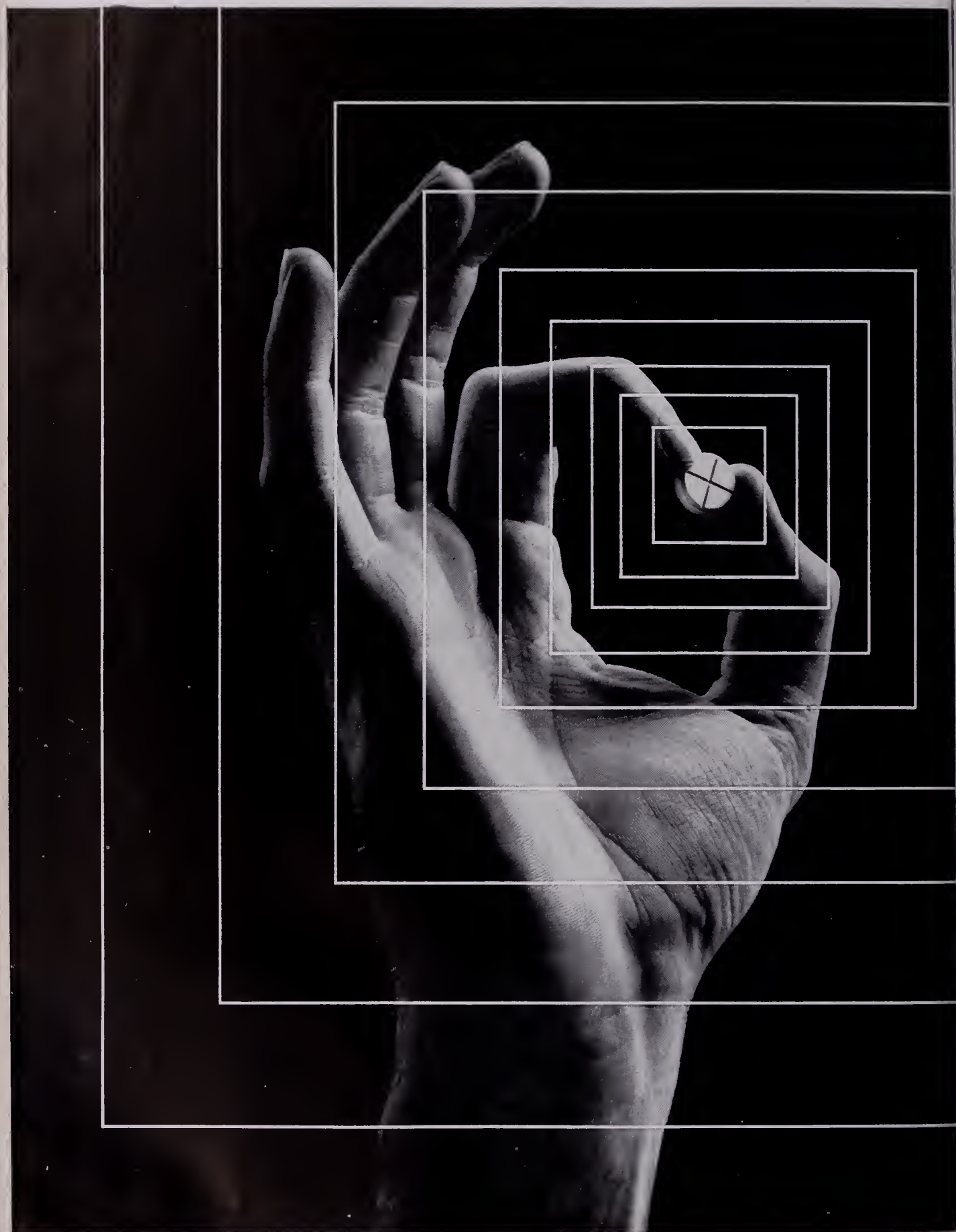
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